


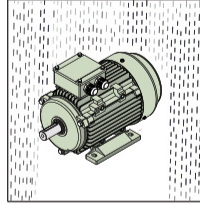
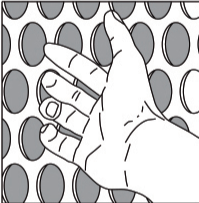
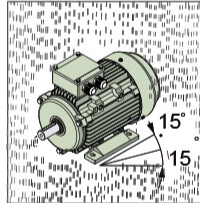
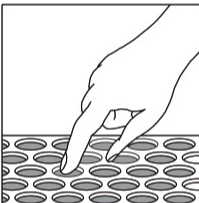
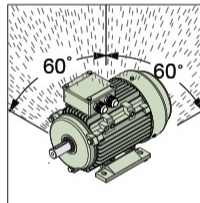
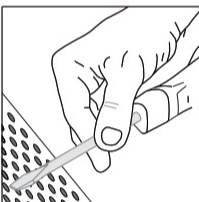
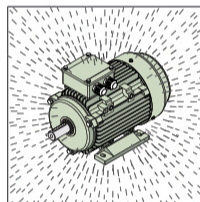
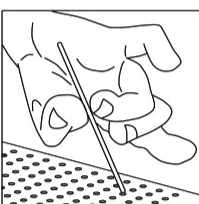
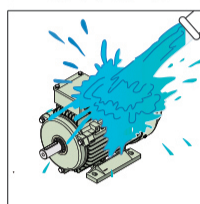
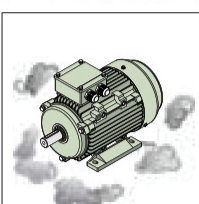
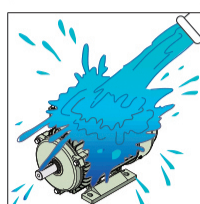
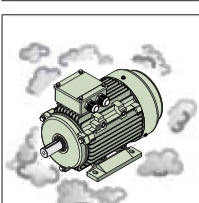
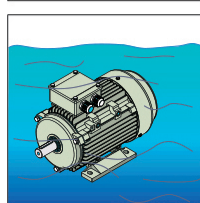
NIESEI

T R A N S M I S S I O N



INDUCTION MOTORS
3-PHASE MOTORS
1-PHASE MOTORS
ELECTROMAGNETIC
BRAKE MOTORS

www.Bangkokgear.com

PROTECTION AGAINST PENETRATION OF SOLID MATTER		PROTECTION AGAINST PENETRATION OF FLUIDS	
1st digit	DESCRIPTION	2nd digit	DESCRIPTION
0	 <p>Not protected</p>	0	 <p>Not protected</p>
1	 <p>Protected against solid bodies larger than 50 mm</p>	1	 <p>Protected against vertically falling drops of water</p>
2	 <p>Protected against solid bodies larger than 12 mm</p>	2	 <p>Protected against vertically falling drops of water up to 15°</p>
3	 <p>Protected against solid bodies larger than 2.5 mm</p>	3	 <p>Protected against rain up to 60°</p>
4	 <p>Protected against solid bodies larger than 1 mm</p>	4	 <p>Protected against rain falling from any direction</p>
5	 <p>Protected against deposition of dust</p>	5	 <p>Protected against sprayed water from any direction</p>
6	 <p>Totally protected against deposition of dust</p>	6	 <p>Protected against temporary immersion</p>
		7	<p>Protected against immersion between 0.15 and 1 m</p>
		8	<p>Protected against immersion at preset pressure and time</p>

INSULATION CLASSIFICATION

The insulation system of an electric motor is determined by a given insulation class on the basis of its thermal resistance.

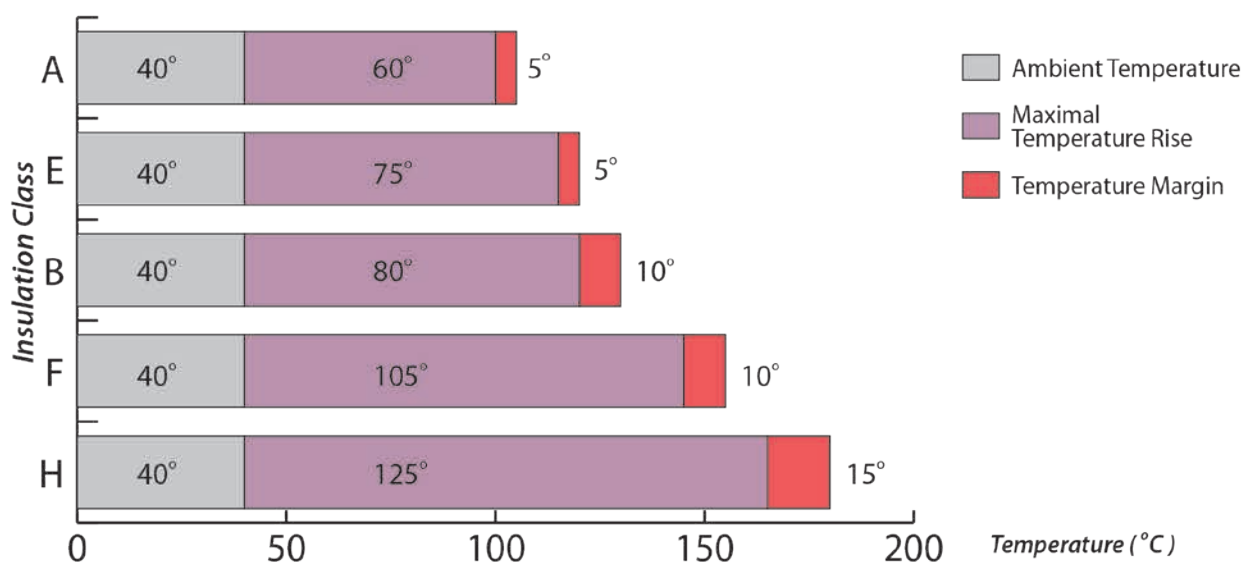
This thermal resistance should be guaranteed by the entire set of electric insulating materials used in the motor insulating system.

Thermal resistance classification is related to the temperature of the hotspot in the insulation occurring during rated operating conditions of the electric motor, allowing for the highest permissible rise in average temperature.

This rise should be selected so that at the highest permissible ambient temperature, the temperature of the hotspot in insulation will not exceed the value assigned to a given thermal resistance class.

Symbols of thermal resistance class (permissible insulation temperatures for ambient temperature of 40 °C)

Symbol	Temperature [°C]
A	105
E	120
B	130
F	155
H	180



Insulation class F for an electric motor means that at ambient temperature of 40 °C the temperature rise of its windings may be max. 105 °C with the additional temperature margin of 10 °C (under specified measuring conditions in accordance with the IEC 60034-1 standard).

The motors made by NIESEI Motor in their basic version have the insulation class F while the temperature rise is for class B. It means longer life of motors.

On customer's demand, we make motors with insulation class H.

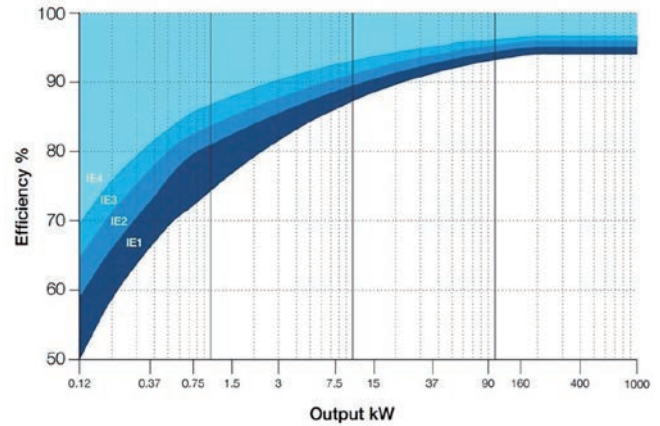
Strengthened insulation system makes it possible to supply our motors from frequency inverters.

Class F

Efficiency Standards

NIESEI motors determines efficiency value according to IEC 60034-30-1:2014. The standard defines four international efficiency classes (IE) for single-speed electric motors that are rated according to IEC 60034-1 or IEC 60079-0, for operation on a sinusoidal voltage supply. This standard establishes a set of limit efficiency values based on frequency, number of poles and motor power.

Super-Premium efficiency	IE4
Premium efficiency	IE3
High efficiency	IE2
Standard efficiency	IE1



Minimum 50 Hz efficiency values defined in IEC 60034-30-1:2014

OUTPUT KW	IE1				IE2				IE3				IE4			
	2 pole	4 pole	6 pole	8 pole	2 pole	4 pole	6 pole	8 pole	2 pole	4 pole	6 pole	8 pole	2 pole	4 pole	6 pole	8 pole
0.75	72.1	72.1	70.0	61.2	77.4	79.6	75.9	66.2	80.7	82.5	78.9	75.0	83.5	85.7	82.7	78.4
1.1	75.0	75.0	72.9	66.5	79.6	81.4	78.1	70.8	82.7	84.1	81.0	77.7	85.2	87.2	84.5	80.8
1.5	77.2	77.2	75.2	70.2	81.3	82.8	79.8	74.1	84.2	85.3	82.5	79.7	86.5	88.2	85.9	82.6
2.2	79.7	79.7	77.7	74.2	83.2	84.3	81.8	77.6	85.9	86.7	84.3	81.9	88.0	89.5	87.4	84.5
3	81.5	81.5	79.7	77.0	84.6	85.5	83.3	80.0	87.1	87.7	85.6	83.5	89.1	90.4	88.6	85.9
4	83.1	83.1	81.4	79.2	85.8	86.6	84.6	81.9	88.1	88.6	86.8	84.8	90.0	91.1	89.5	87.1
5.5	84.7	84.7	83.1	81.4	87.0	87.7	86.0	83.8	89.2	89.6	88.0	86.2	90.9	91.9	90.5	88.3
7.5	86.0	86.0	84.7	83.1	88.1	88.7	87.2	85.3	90.1	90.4	89.1	87.3	91.7	92.6	91.3	89.3
11	87.6	87.6	86.4	85.0	89.4	89.8	88.7	86.9	91.2	91.4	90.3	88.6	92.6	93.3	92.3	90.4
15	88.7	88.7	87.7	86.2	90.3	90.6	89.7	88.0	91.9	92.1	91.2	89.6	93.3	93.9	92.9	91.2
18.5	89.3	89.3	88.6	86.9	90.9	91.2	90.4	88.6	92.4	92.6	91.7	90.1	93.7	94.2	93.4	91.7
22	89.9	89.9	89.2	87.4	91.3	91.6	90.9	89.1	92.7	93.0	92.2	90.6	94.0	94.5	93.7	92.1
30	90.7	90.7	90.2	88.3	92.0	92.3	91.7	89.8	93.3	93.6	92.9	91.3	94.5	94.9	94.2	92.7
37	91.2	91.2	90.8	88.8	92.5	92.7	92.2	90.3	93.7	93.9	93.3	91.8	94.8	95.2	94.5	93.1
45	91.7	91.7	91.4	89.2	92.9	93.1	92.7	90.7	94.0	94.2	93.7	92.2	95.0	95.4	94.8	93.4
55	92.1	92.1	91.9	89.7	93.2	93.5	93.1	91.0	94.3	94.6	94.1	92.5	95.3	95.7	95.1	93.7
75	92.7	92.7	92.6	90.3	93.8	94.0	93.7	91.6	94.7	95.0	94.6	93.1	95.6	96.0	95.4	94.2
90	93.0	93.0	92.9	90.7	94.1	94.2	94.0	91.9	95.0	95.2	94.9	93.4	95.8	96.1	95.6	94.4
110	93.3	93.3	93.3	91.1	94.3	94.5	94.3	92.3	95.2	95.4	95.1	93.7	96.0	96.3	95.8	95.1
132	93.5	93.5	93.5	91.5	94.6	94.7	94.6	92.6	95.4	95.6	95.4	94.0	96.2	96.4	96.0	94.9
160	93.8	93.8	93.8	91.9	94.8	94.9	94.8	93.0	95.6	95.8	95.6	94.3	96.3	96.6	96.2	95.1
200	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.3	95.4
250	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.5	95.4
315	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.6	95.4
355-1000	94.0	94.0	94.0	92.5	95.0	95.1	95.0	93.5	95.8	96.0	95.8	94.6	96.5	96.7	96.6	95.4

Calculation for estimated power consumption and electricity saving

(E) energy consumption = kw (in) x hr

$$kw (in) = \frac{kw (out) \times d.p.}{n}$$

(C) Electricity cost = (E) x Pr.

E = estimated energy consumption, kw.h

C = estimated electricity cost, THB

kw (in) = Input power, kw

kw (out) = Output power, kw

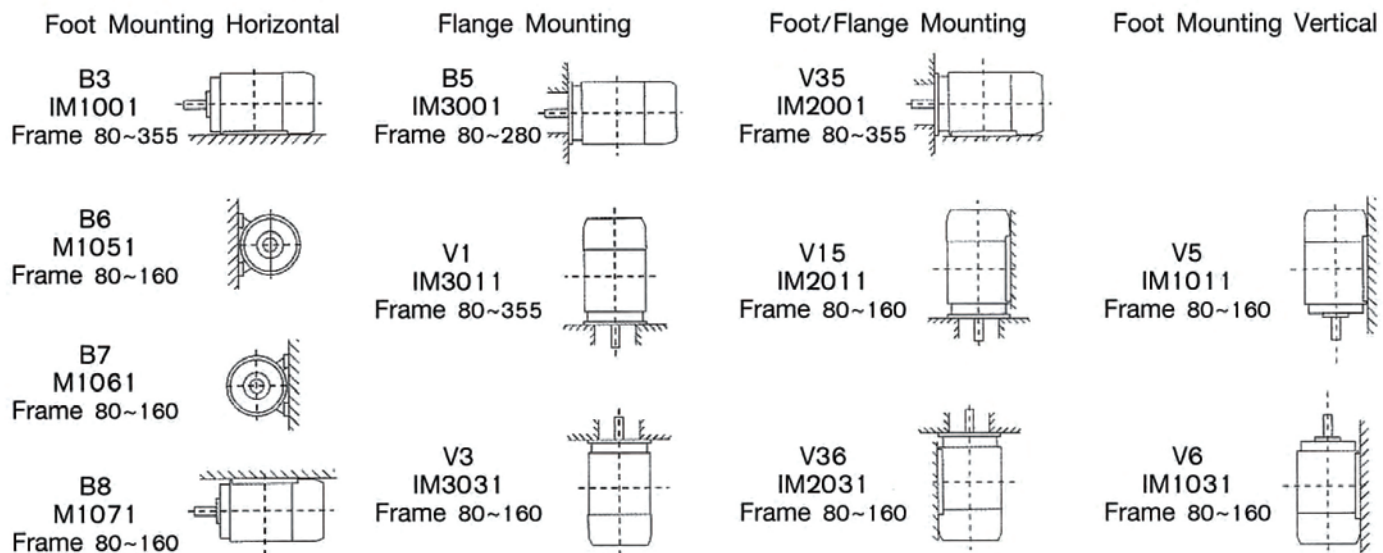
d.p. - duty point, %

n = efficiency, %

hr = Time used per year, hours

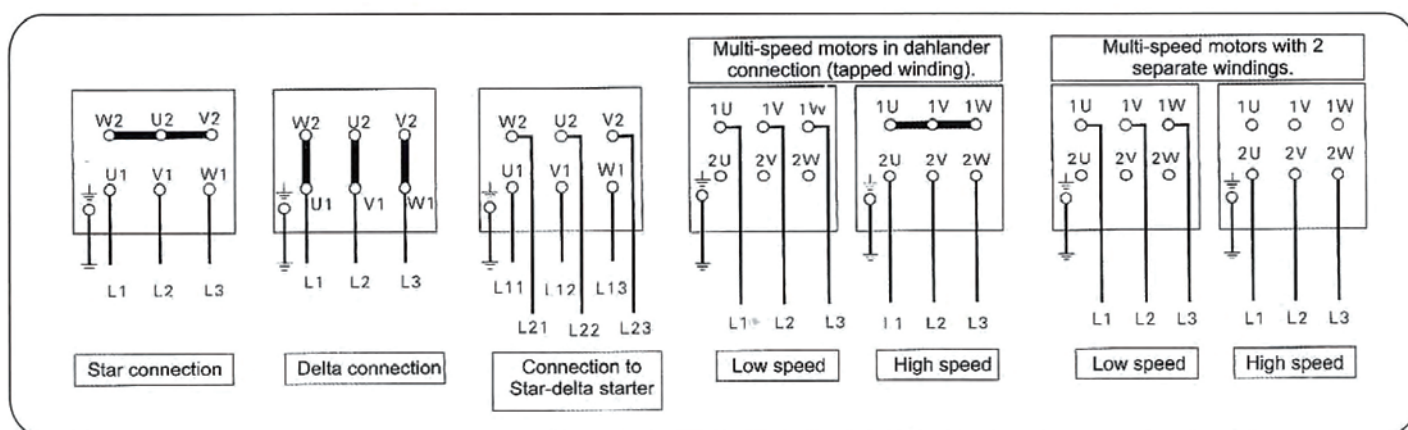
Pr = electricity unit price, THB/kw.h

Mounting arrangements (IEC 60034-7)



Connection diagrams

Three phase motors with cage rotor



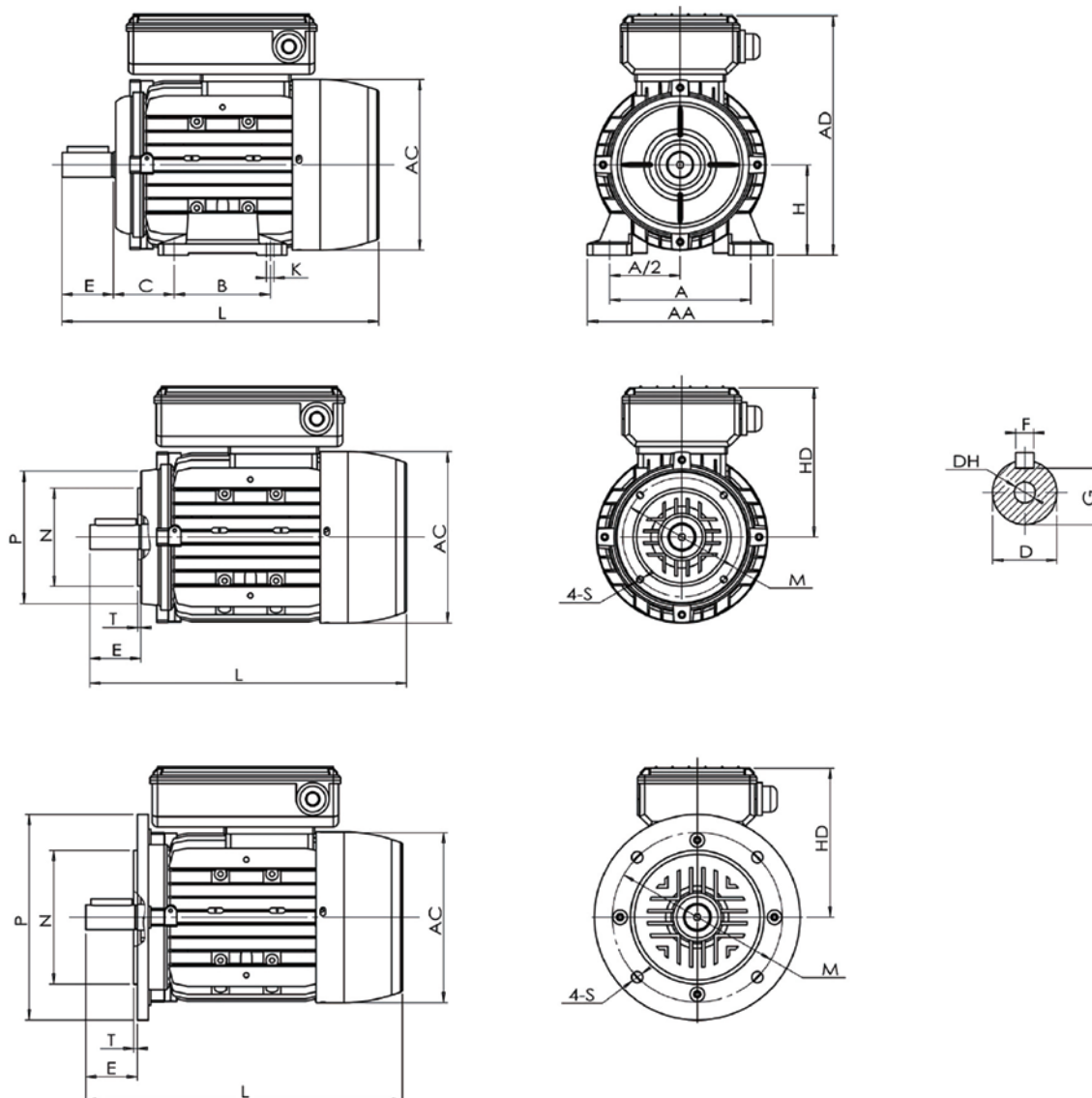
ML Series
Single-Phase Capacitor Start and Capacitor Run
Asynchronous Motors
Aluminum Housing



▲ **Echnical Data (at230v/50HZ)**

Model	Rated Output		Current (A)	Speed (r/min)	Eff (%)	(Cos Φ)	Tst/Tn	Tmax/Tn	Starting Current (A)	Run Capacitor (μ F/V)	Start Capacitor (μ F/V)	W.T (Kg)
	KW	HP										
Speed 3000 RPM 2-Pole 50Hz												
ML631-2	0.18	0.25	1.38	2710	63	0.9	2.2	1.7	8	10 μ F/450V	30 μ F/250V	3.9
ML632-2	0.25	0.37	1.89	2710	64	0.9	2.2	1.7	10	12 μ F/450V	40 μ F/250V	4.4
ML711-2	0.37	0.5	2.66	2780	65	0.93	2.2	1.7	15	12 μ F/450V	75 μ F/250V	6.5
ML712-2	0.55	0.75	3.78	2790	68	0.93	2.2	1.7	20	16 μ F/450V	100 μ F/250V	7
ML801-2	0.75	1	4.87	2800	72	0.93	2.3	1.8	30	20 μ F/450V	100 μ F/250V	9
ML802-2	1.1	1.5	7.04	2810	73	0.93	2.3	1.8	40	30 μ F/450V	150 μ F/250V	10
ML90S-2	1.5	2	9.48	2810	74	0.93	2.3	1.8	55	40 μ F/450V	200 μ F/300V	16
ML90L-2	2.2	3	13.57	2810	75	0.94	2.3	1.8	75	50 μ F/450V	250 μ F/300V	17
ML100L-2	3	4	17.83	2830	77	0.95	2.3	1.8	110	60 μ F/450V	400 μ F/300V	25
ML112M1-2	3.7	5	21.48	2850	78	0.96	2.3	1.8	140	60 μ F/450V	600 μ F/300V	33
ML112M2-2	4	5.5	22.18	2850	80	0.98	2.3	1.8	150	60 μ F/450V	600 μ F/300V	34
ML132S-2	5.5	7.5	32.5	2850	81	0.95	2.3	1.8	165	80 μ F/450V	800 μ F/300V	42
Speed 1500 RPM 4-Pole 50Hz												
ML631-4	0.12	0.17	1.05	1350	55	0.9	2.2	1.7	6	10 μ F/450V	30 μ F/250V	4.1
ML632-4	0.18	0.25	1.55	1350	56	0.9	2.2	1.7	8.5	12 μ F/450V	40 μ F/250V	4.5
ML711-4	0.25	0.37	2.01	1380	60	0.9	2.2	1.7	10	12 μ F/450V	50 μ F/250V	5.9
ML712-4	0.37	0.5	2.84	1380	63	0.9	2.2	1.7	15	16 μ F/450V	75 μ F/250V	6.9
ML801-4	0.55	0.75	4.03	1400	66	0.9	2.3	1.8	20	20 μ F/450V	100 μ F/250V	9.6
ML802-4	0.75	1	5.25	1410	69	0.9	2.3	1.8	30	25 μ F/450V	100 μ F/250V	11
ML90S-4	1.1	1.5	7.24	1410	71	0.93	2.3	1.8	40	35 μ F/450V	150 μ F/250V	14
ML90L-4	1.5	2	9.61	1400	73	0.93	2.3	1.8	55	40 μ F/450V	200 μ F/300V	17
ML100L1-4	2.2	3	13.9	1430	74	0.93	2.3	1.8	75	50 μ F/450V	300 μ F/300V	23
ML100L2-4	3	4	18.7	1440	75	0.93	2.3	1.8	110	60 μ F/450V	500 μ F/300V	29
ML112M1-4	3.7	5	21.99	1440	77	0.95	2.3	1.8	140	60 μ F/450V	600 μ F/300V	31
ML112M2-4	4	5.5	22.41	1440	80	0.97	2.3	1.8	150	60 μ F/450V	600 μ F/300V	33
ML132S-4	5.5	7.5	32.9	1440	80	0.97	2.3	1.8	165	80 μ F/450V	800 μ F/300V	42

ML Series Dimensional Drawings



Frame Size	Mounting Dimensions																			Overall Dimensions					
	A	B	C	D	E	F	G	H	K	DH	IM B14					IM B5									
	M	N	P	S	T	M	N	P	S	T	AA	AC	AD	HD	L										
63	100	80	40	11	23	4	8.5	63	7x10	M4X10	75	60	90	M5	2.5	115	95	140	10	3	120	130	179	116	212
71	112	90	45	14	30	5	11	71	7x10	M5X12	85	70	105	M6	2.5	130	110	160	10	3.5	132	145	194	123	255
80	125	100	50	19	40	6	15.5	80	10x13	M6X16	100	80	120	M6	3	165	130	200	12	3.5	157	165	223	143	290
90S	140	100	56	24	50	8	20	90	10x13	M8X20	115	95	140	M8	3	165	130	200	12	3.5	172	185	240	150	335
90L	140	125	56	24	50	8	20	90	10x13	M8X20	115	95	140	M8	3	165	130	200	12	3.5	172	185	240	150	365
100L	160	140	63	28	60	8	24	100	12x15	M10X22	130	110	160	M8	3.5	215	180	250	15	4	196	205	260	160	398/416
112M	190	140	70	28	60	8	24	112	12x15	M10X22	130	110	160	M8	3.5	215	180	250	15	4	222	230	295	183	416

MS Series Aluminum Housing Three Phase Asynchronous Induction Motor



▲ Speed 3000RPM 2-Pole 50HZ

Model	Rated Output		Rated Speed RPM	Efficiency %	Power Factor COS ϕ	Rated Current			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In	Weight kg
	KW	HP				380	400	415					
MS 631-2	0.18	0.25	2720	65	0.8	0.53	0.5	0.48	0.61	2.2	2.2	5.5	4
MS 632-2	0.25	0.37	2720	68	0.81	0.69	0.66	0.63	0.96	2.2	2.2	5.5	4.2
MS 711-2	0.37	0.5	2740	70	0.81	0.99	0.94	0.91	0.26	2.2	2.2	6.1	5.2
MS 712-2	0.55	0.75	2740	73	0.82	1.4	1.33	1.28	1.88	2.2	2.3	6.1	6
MS 801-2	0.75	1	2840	72.1	0.83	1.9	1.8	1.74	2.52	2.3	2.4	6.1	9
MS 802-2	1.1	1.5	2840	75	0.84	2.65	2.51	2.42	3.7	2.4	2.4	6.3	11
MS 90S-2	1.5	2	2840	77.2	0.84	3.51	3.33	3.21	5.04	2.3	2.3	6.5	13
MS 90L-2	2.2	3	2840	79.7	0.85	4.93	4.68	4.51	7.4	2.4	2.5	6.8	15
MS 100L-2	3	4	2860	81.5	0.87	6.41	6.09	5.87	10	2.4	2.4	6.9	20
MS 112M-2	4	5.5	2880	83.1	0.88	8.29	7.88	7.59	13.26	2.3	2.4	7.0	26
MS 132S1-2	5.5	7.5	2900	84.7	0.88	11.2	10.6	10.3	18.11	2.2	2.3	7.2	40
MS 132S2-2	7.5	10	2900	86	0.88	15	14.3	13.8	24.7	2.3	2.4	6.9	43
MS 160M1-2	11	15	2930	87.6	0.89	21.4	20.3	19.6	35.85	2.2	2.3	6.8	88
MS 160M2-2	15	20	2930	88.7	0.89	28.8	27.4	26.4	48.89	2.3	2.3	7	98

▲ Speed 1500RPM 4-Pole 50HZ

Model	Rated Output		Rated Speed RPM	Efficiency %	Power Factor COS ϕ	Rated Current			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In	Weight kg
	KW	HP				380	400	415					
MS 631-4	0.12	0.17	1310	57	0.72	0.44	0.42	0.41	0.84	2.1	2.2	4.4	4
MS 632-4	0.18	0.25	1310	60	0.73	0.62	0.59	0.57	1.26	2.1	2.2	4.4	4.5
MS 711-4	0.25	0.37	1330	65	0.74	0.79	0.75	0.72	1.73	2.1	2.2	5.2	5.5
MS 712-4	0.37	0.5	1330	67	0.75	1.12	1.06	1.02	2.54	2.1	2.2	5.2	6
MS 801-4	0.55	0.75	1390	71.1	0.75	1.57	1.49	1.43	3.78	2.4	2.3	5.2	8.5
MS 802-4	0.75	1	1390	72.1	0.76	2.08	1.97	1.90	5.15	2.3	2.3	6.1	9.5
MS 90S-4	1.1	1.5	1390	75	0.77	2.89	2.74	2.64	7.56	2.3	2.4	6.3	11
MS 90L-4	1.5	2	1390	77.2	0.79	3.73	3.55	3.42	10.31	2.4	2.4	6.1	14
MS 100L1-4	2.2	3	1390	79.7	0.81	5.17	4.91	4.74	15.12	2.3	2.4	6.5	19
MS 100L2-4	3	4	1410	81.5	0.82	6.81	6.47	6.24	20.32	2.5	2.5	6.5	22
MS 112M-4	4	5.5	1410	83.1	0.82	8.91	8.46	8.16	27.09	2.4	2.4	7	29
MS 132S-4	5.5	7.5	1435	84.7	0.83	11.9	11.3	10.9	36.6	2.3	2.4	7	41
MS 132M-4	7.5	10	1440	86	0.84	15.7	15	14.4	49.74	2.3	2.3	7	52
MS 160M-4	11	15	1440	87.6	0.84	22.7	21.6	20.8	72.95	2.2	2.3	6.5	90
MS 160L-4	15	20	1460	88.7	0.85	30.2	28.7	27.6	98.12	2.2	2.2	7.2	99

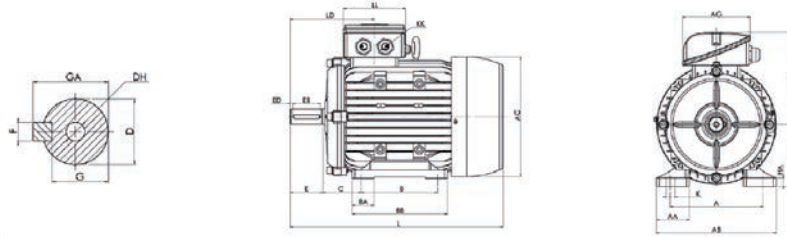
▲ **Speed 1000RPM 6-Pole 50HZ**

Model	Rated Output		Rated Speed RPM	Efficiency %	Power Factor COS ϕ	Rated Current			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In	Weight kg
	KW	HP				380	400	415					
MS 711-6	0.18	0.25	850	56	0.66	0.74	0.7	0.68	1.91	1.9	2	4.4	5
MS 712-6	0.25	0.37	850	59	0.68	0.95	0.9	0.87	2.65	1.9	2	4	6
MS 801-6	0.37	0.5	885	62	0.7	1.3	1.23	1.19	3.93	1.9	2	4.7	8
MS 802-6	0.55	0.75	885	65	0.72	1.78	1.69	1.63	5.84	1.9	2.1	4.7	9.5
MS 90S-6	0.75	1	910	70	0.72	2.26	2.15	2.07	7.87	2.1	2.1	5.5	10
MS 90L-6	1.1	1.5	910	72.9	0.73	3.14	2.98	2.87	11.54	2	2.1	5.5	14
MS 100L-6	1.5	2	920	75.2	0.75	4.04	3.83	3.7	15.57	2	2	6	20
MS 112M-6	2.2	3	935	77.7	0.76	5.65	5.36	5.17	22.47	2.2	2.2	6	25
MS 132S-6	3	4	960	79.7	0.76	7.52	7.14	6.88	29.84	2	2.1	6.5	38
MS 132M1-6	4	5.5	960	81.4	0.76	9.8	9.31	8.97	39.79	2	2.1	6.5	46
MS 132M2-6	5.5	7.5	960	83.1	0.77	13.1	12.4	12	54.71	2.2	2.2	6.5	53
MS 160M-6	7.5	10	970	84.7	0.77	17.4	16.6	16	73.84	2	2.1	6.7	86
MS 160L-6	11	15	970	86.4	0.78	22.2	21.1	20.3	108.3	2.2	2.3	6.7	98

▲ **Speed 750RPM 8-Pole 50HZ**

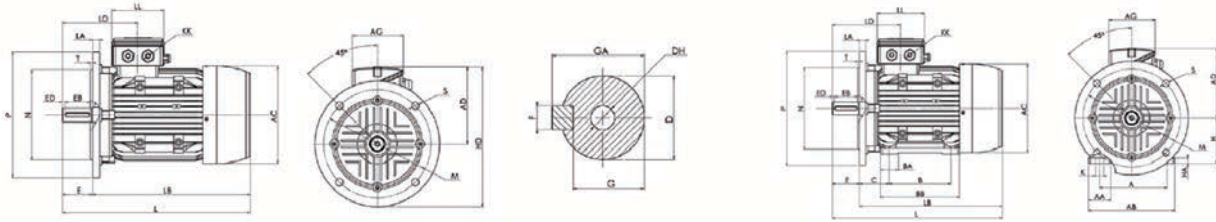
Model	Rated Output		Rated Speed RPM	Efficiency %	Power Factor COS ϕ	Rated Current			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In	Weight kg
	KW	HP				380	400	415					
MS 801-8	0.18	0.25	645	51	0.61	0.88	0.84	0.8	2.49	1.8	1.9	3.3	9.5
MS 802-8	0.25	0.37	645	54	0.61	1.15	1.1	1.06	3.46	1.8	1.9	3.3	10
MS 90S-8	0.37	0.5	670	62	0.61	1.49	1.41	1.36	5.12	1.8	1.9	4.9	12
MS 90L-8	0.55	0.75	670	63	0.61	2.17	2.07	1.99	7.61	1.8	2	4	15
MS 100L1-8	0.75	1	680	71	0.67	2.4	2.28	2.19	10.23	1.8	2	4	16.5
MS 100L2-8	1.1	1.5	680	73	0.69	3.32	3.15	3.04	15	1.8	2	5	19
MS 112M-8	1.5	2	690	75	0.69	4.4	4.18	4.03	20.46	1.8	2	5	25
MS 132S-8	2.2	3	705	78	0.71	6.04	5.73	5.53	29.59	1.8	2	6	34
MS 132M-8	3	4	705	79	0.73	7.9	7.51	7.24	40.35	1.8	2	6	40
MS 160M1-8	4	5.5	720	81	0.73	10.3	9.76	9.41	53.06	1.9	2	6	62
MS 160M2-8	5.5	7.5	720	83	0.74	13.6	12.9	12.5	72.59	2	2	6	71
MS 160L-8	7.5	10	720	85.5	0.75	17.8	16.9	16.3	99.5	2	2	6	90

HSA Series Dimensional Drawings



▲ IM B3 H80-160

Model	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
80	125	35	157	158	129	104	100	31	125	50	19	M6X16	40	30	5	6	15.5	21.5	80	8	10X14	1-M25X1.5	290	75	104
90S	140	37	173	175	140	104	100	31.5	125	56	24	M8X19	50	40	5	8	20	27	90	10	10X14	1-M25X1.5	325	95	104
90L	140	37	173	175	140	104	125	31.5	150	56	24	M8X19	50	40	5	8	20	27	90	10	10X14	1-M25X1.5	350	95	104
100L	160	40	196	198	156	104	140	39	172	63	28	M10X22	60	50	5	8	24	31	100	11	12X16	1-M32X1.5	398	88.5	104
112M	190	41	227	219	166	124	140	43	180	70	28	M10X22	60	50	5	8	24	31	112	12	12X16	2-M32X1.5	447	92	114
132S	216	51	262	258	188	124	140	46	186	89	38	M12X28	80	65	7.5	10	33	41	132	15	12X16	2-M32X1.5	475	100	114
132M	216	51	262	258	188	124	178	46	224	89	38	M12X28	80	65	7.5	10	33	41	132	15	12X16	2-M32X1.5	513	100	114
160M	254	55	304	315	242	162	210	50	260	108	42	M16X36	110	90	10	12	37	45	160	18	15X18	2-M40X1.5	609	159	154
160L	254	55	304	315	242	162	254	50	304	108	42	M16X36	110	90	10	12	37	45	160	18	15X18	2-M40X1.5	653	159	154

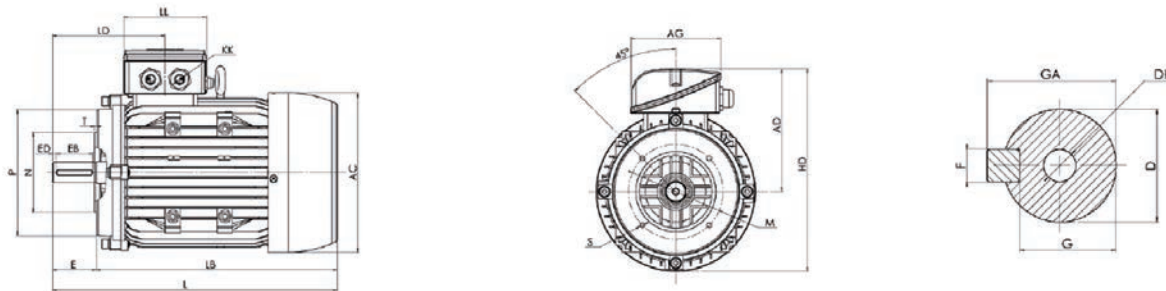


▲ IIM B5 H80-160

Model	AC	AD	AG	D	DH	E	EB	ED	F	G	GA	HD	METRIC	L	LA	LB	LD	LL	M	N	P	S	T
80	158	129	104	19	M6X16	40	30	5	6	15.5	21.5	229	2-M25X1.5	290	12	250	75	104	165	130	200	12	3.5
90S	175	140	104	24	M8X19	50	40	5	8	20	27	240	2-M25X1.5	325	12	275	95	104	165	130	200	12	3.5
90L	175	140	104	24	M8X19	50	40	5	8	20	27	240	2-M25X1.5	350	12	300	95	104	165	130	200	12	3.5
100L	198	156	104	28	M10X22	60	50	5	8	24	31	281	2-M32X1.5	398	13	338	88.5	104	215	180	250	14.5	4
112M	219	166	124	28	M10X22	60	50	5	8	24	31	291	2-M32X1.5	447	14	387	92	114	215	180	250	14.5	4
132S	258	188	124	38	M12X28	80	65	7.5	10	33	41	338	2-M32X1.5	475	14	395	100	114	265	230	300	14.5	4
132M	258	188	124	38	M12X28	80	65	7.5	10	33	41	338	2-M32X1.5	513	14	433	100	114	265	230	300	14.5	4
160M	315	242	162	42	M16X36	110	90	10	12	37	45	417	2-M40X1.5	609	15	499	158.5	154	300	250	350	18.5	5
160L	315	242	162	42	M16X36	110	90	10	12	37	45	417	2-M40X1.5	653	15	543	158.5	154	300	250	350	18.5	5

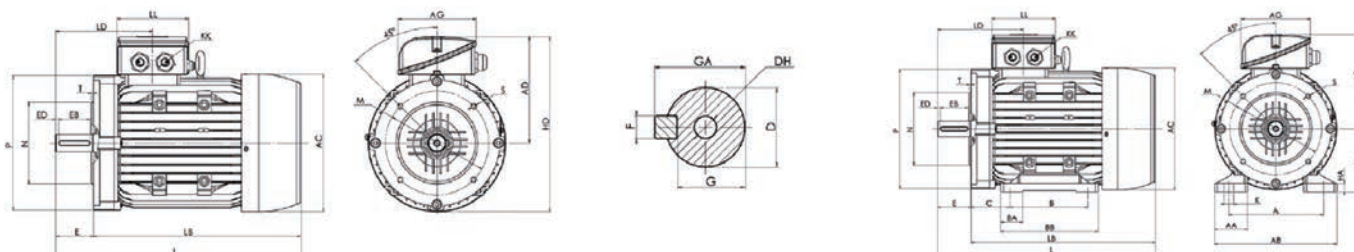
▲ IM B35 H80-160

Model	A	AA	AB	AC	AD	AG	B	BA	BB	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	METRIC	L	LA	LB	LD	LL	M	N	P	S	T
80	125	35	157	158	129	104	100	31	125	50	19	M6X16	40	30	5	6	15.5	21.5	80	8	10X14	2-M25X1.5	290	12	250	75	104	165	130	200	12	3.5
90S	140	37	173	175	140	104	100	31.5	125	56	24	M8X19	50	40	5	8	20	27	90	10	10X14	2-M25X1.5	325	12	275	95	104	165	130	200	12	3.5
90L	140	37	173	175	140	104	125	31.5	150	56	24	M8X19	50	40	5	8	20	27	90	10	10X14	2-M25X1.5	350	12	300	95	104	165	130	200	12	3.5
100L	160	40	196	198	156	104	140	39	172	63	28	M10X22	60	50	5	8	24	31	100	11	12X16	2-M25X1.5	398	13	338	88.5	104	215	180	250	14.5	4
112M	190	41	227	219	166	124	140	43	180	70	28	M10X22	60	50	5	8	24	31	112	12	12X16	2-M32X1.5	447	14	387	92	114	215	180	250	14.5	4
132S	216	51	262	258	188	124	140	46	186	89	38	M12X28	80	65	7.5	10	33	41	132	15	12X16	2-M32X1.5	475	14	395	100	114	265	230	300	14.5	4
132M	216	51	262	258	188	124	178	46	224	89	38	M12X28	80	65	7.5	10	33	41	132	15	12X16	2-M32X1.5	513	14	433	100	114	265	230	300	14.5	4
160M	254	55	304	315	242	162	210	50	260	108	42	M16X36	110	90	10	12	37	45	160	18	15X18	2-M40X1.5	609	15	499	158.5	154	300	250	350	18.5	5
160L	254	55	304	315	242	162	254	50	304	108	42	M16X36	110	90	10	12	37	45	160	18	15X18	2-M40X1.5	653	15	543	158.5	154	300	250	350	18.5	5



▲ **IM B14 H80-132**

Model	AC	AD	AG	D	DH	E	EB	ED	F	G	GA	HD	METRIC	L	LB	LD	LL	M	N	P	S	T
80	158	129	104	19	M6X16	40	30	5	6	15.5	21.5	208	2-M25x1.5	290	250	75	104	100	80	120	M6	3
90S	175	140	104	24	M8X19	50	40	5	8	20	27	227.5	2-M25x1.5	325	275	95	104	115	95	140	M8	3
90L	175	140	104	24	M8X19	50	40	5	8	20	27	227.5	2-M25x1.5	350	300	95	104	115	95	140	M8	3
100L	198	156	104	28	M10X22	60	50	5	8	24	31	255	2-M32x1.5	398	338	88.5	104	130	110	160	M8	3.5
112M	219	166	124	28	M10X22	60	50	5	8	24	31	275.5	2-M32x1.5	447	387	92	114	130	110	160	M8	3.5
132S	258	188	124	38	M12X28	80	65	7.5	10	33	41	317	2-M32x1.5	475	395	100	114	165	130	200	M10	3.5
132M	258	188	124	38	M12X28	80	65	7.5	10	33	41	317	2-M32x1.5	513	433	100	114	165	130	200	M10	3.5



▲ **IM B34 H80-132**

Model	A	AA	AB	AC	AD	AG	B	BB	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	KK	L	LB	LD	LL	M	N	P	S	T
80	125	35	160	167	147	104	100	150	50	19	M6X16	40	30	5	6	15.5	21.5	80	10	4 - Φ 10	2-M25X1.5	304	264	112	104	130	110	120	M6	3
90S	140	36	176	182	155	104	100	161	56	24	M8X19	50	40	5	8	20	27	90	12	4 - Φ 10	2-M25X1.5	336	286	130	104	130	110	140	M8	3
90L	140	36	176	182	155	104	125	186	56	24	M8X19	50	40	5	8	20	27	90	12	4 - Φ 10	2-M25X1.5	361	311	130	104	130	110	140	M8	3
100L	160	40	200	205	166	104	140	213	63	28	M10X22	60	50	5	8	24	31	100	14	4 - Φ 12	2-M25X1.5	406	346	139	104	165	130	160	M8	3.5
112M	190	50	240	219	182	124	140	225	70	28	M10X22	60	50	5	8	24	31	112	15	4 - Φ 12	2-M32X1.5	452	392	147	114	165	130	160	M8	3.5
132S	216	55	262	258	203	124	140	200	89	38	M12X28	80	65	7.5	10	33	41	132	18	4 - Φ 12	2-M32X1.5	470	3990	172	114	215	180	200	M10	3.5
132M	216	55	262	258	203	124	178	238	89	38	M12X28	80	65	7.5	10	33	41	132	18	4 - Φ 12	2-M32X1.5	508	428	172	114	215	180	200	M10	3.5

Technical Data

SPEED 3000RPM 2-POLE 50HZ

Model	Rated Output		Rated Speed rpm	Efficiency η % (IE1)	Power factor COS ϕ	Rated current A			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In
	KW	HP				380	400	415				
631-2	0.18	0.25	2720	65	0.80	0.53	0.5	0.48	0.61	2.2	2.2	5.5
632-2	0.25	0.37	2720	68	0.81	0.69	0.66	0.63	0.96	2.2	2.2	5.5
711-2	0.37	0.5	2740	70	0.81	0.99	0.94	0.91	0.26	2.2	2.2	6.1
712-2	0.55	0.75	2740	73	0.82	1.4	1.33	1.28	1.88	2.2	2.3	6.1
801-2	0.75	1	2840	72.1	0.83	1.9	1.8	1.74	2.52	2.3	2.4	6.1
802-2	1.1	1.5	2840	75.0	0.84	2.65	2.51	2.42	3.7	2.4	2.4	6.3
90S-2	1.5	2	2840	77.2	0.84	3.51	3.33	3.21	5.04	2.3	2.3	6.5
90L-2	2.2	3	2840	79.7	0.85	4.93	4.68	4.51	7.4	2.4	2.5	6.8
100L-2	3	4	2860	81.5	0.87	6.41	6.09	5.87	10	2.4	2.4	6.9
112M-2	4	5.5	2880	83.1	0.88	8.29	7.88	7.59	13.26	2.3	2.4	7.0
132S1-2	5.5	7.5	2900	84.7	0.88	11.2	10.6	10.3	18.11	2.2	2.3	7.2
132S2-2	7.5	10	2900	86.0	0.88	15.0	14.3	13.8	24.7	2.3	2.4	6.9
160M1-2	11	15	2930	87.6	0.89	21.4	20.3	19.6	35.85	2.2	2.3	6.8
160M2-2	15	20	2930	88.7	0.89	28.8	27.4	26.4	48.89	2.3	2.3	7.0
160L-2	18.5	25	2930	89.3	0.90	34.9	33.2	32.0	60.3	2.4	2.5	7.0
180M-2	22	30	2940	89.9	0.90	41.2	39.2	37.7	71.46	2.3	2.3	6.9
200L1-2	30	40	2950	90.7	0.90	55.8	53.0	51.1	97.12	2.2	2.3	7.1
200L2-2	37	50	2950	91.2	0.90	68.4	65.0	62.6	119.8	2.3	2.4	7.1
225M-2	45	60	2960	91.7	0.90	82.7	78.5	75.7	145.2	2.3	2.5	6.8
250M-2	55	75	2965	92.1	0.90	101	95.7	92.2	177.2	2.1	2.2	6.8
280S-2	75	100	2970	92.7	0.90	137	130	125	241.2	2.3	2.3	7.1
280M-2	90	125	2970	93.0	0.91	161	153	147	289.4	2.2	2.4	7.1
315S-2	110	150	2975	93.3	0.91	197	187	180	353.1	2.2	2.3	7.1
315M-2	132	180	2975	93.5	0.91	235	224	216	423.7	2.3	2.4	6.9
315L1-2	160	200	2975	93.8	0.92	281	267	258	513.6	2.2	2.3	7.0
315L2-2	200	270	2975	94.0	0.92	351	333	321	642	2.2	2.3	7.0
355M-2	250	340	2980	94.0	0.92	438	416	401	801.2	2.2	2.3	7.0
355L-2	315	430	2980	94.0	0.92	552	524	505	1009	2.2	2.3	7.0

SPEED 1500RPM 4-POLE 50HZ

Model	Rated Output		Rated Speed rpm	Efficiency η % (IE1)	Power factor COS ϕ	Rated current A			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In
	KW	HP				380	400	415				
631-4	0.12	0.17	1310	57.0	0.72	0.44	0.42	0.41	0.84	2.1	2.2	4.4
632-4	0.18	0.25	1310	60.0	0.73	0.62	0.59	0.57	1.26	2.1	2.2	4.4
711-4	0.25	0.37	1330	65.0	0.74	0.79	0.75	0.72	1.73	2.1	2.2	5.2
712-4	0.37	0.5	1330	67.0	0.75	1.12	1.06	1.02	2.54	2.1	2.2	5.2
801-4	0.55	0.75	1390	71.1	0.75	1.57	1.49	1.43	3.78	2.4	2.3	5.2
802-4	0.75	1	1390	72.1	0.76	2.08	1.97	1.90	5.15	2.3	2.3	6.1
90S-4	1.1	1.5	1390	75.0	0.77	2.89	2.74	2.64	7.56	2.3	2.4	6.3
90L-4	1.5	2	1390	77.2	0.79	3.73	3.55	3.42	10.31	2.4	2.4	6.1
100L1-4	2.2	3	1390	79.7	0.81	5.17	4.91	4.74	15.12	2.3	2.4	6.5
100L2-4	3	4	1410	81.5	0.82	6.81	6.47	6.24	20.32	2.5	2.5	6.5
112M-4	4	5.5	1410	83.1	0.82	8.91	8.46	8.16	27.09	2.4	2.4	7.0
132S-4	5.5	7.5	1435	84.7	0.83	11.9	11.3	10.9	36.6	2.3	2.4	7.0
132M-4	7.5	10	1440	86.0	0.84	15.7	15.0	14.4	49.74	2.3	2.3	7.0
160M-4	11	15	1440	87.6	0.84	22.7	21.6	20.8	72.95	2.2	2.3	6.5
160L-4	15	20	1460	88.7	0.85	30.2	28.7	27.6	98.12	2.2	2.2	7.2
180M-4	18.5	25	1460	89.3	0.86	36.4	34.5	33.3	121	2.2	2.3	7.5
180L-4	22	30	1470	89.9	0.86	43.1	41.0	39.5	142.9	2.2	2.3	7.2
200L-4	30	40	1470	90.7	0.86	58.4	55.5	53.4	194.9	2.3	2.4	7.1
225S-4	37	50	1470	91.2	0.87	70.8	67.2	64.8	240.4	2.2	2.2	7.1
225M-4	45	60	1475	91.7	0.87	85.7	81.4	78.5	291.4	2.3	2.3	6.9
250M-4	55	75	1475	92.1	0.87	104	98.9	95.3	356.1	2.1	2.2	6.8
280S-4	75	100	1480	92.7	0.87	141	134	129	484	2.2	2.2	7.5
280M-4	90	125	1480	93.0	0.87	169	160	154	580.7	2.1	2.2	7.2
315S-4	110	150	1480	93.3	0.88	203	193	186	709.8	2.2	2.2	6.9
315M-4	132	180	1480	93.5	0.88	243	231	223	851.8	2.1	2.2	6.9
315L1-4	160	200	1480	93.8	0.89	291	276	266	1032	2.1	2.2	6.7
315L2-4	200	270	1480	94.0	0.89	363	345	332	1291	2.1	2.2	6.9
355M-4	250	340	1490	94.0	0.90	449	426	411	1602	2.2	2.2	6.9
355L-4	315	430	1490	94.0	0.90	565	537	517	2019	2.1	2.2	6.9

Technical Data

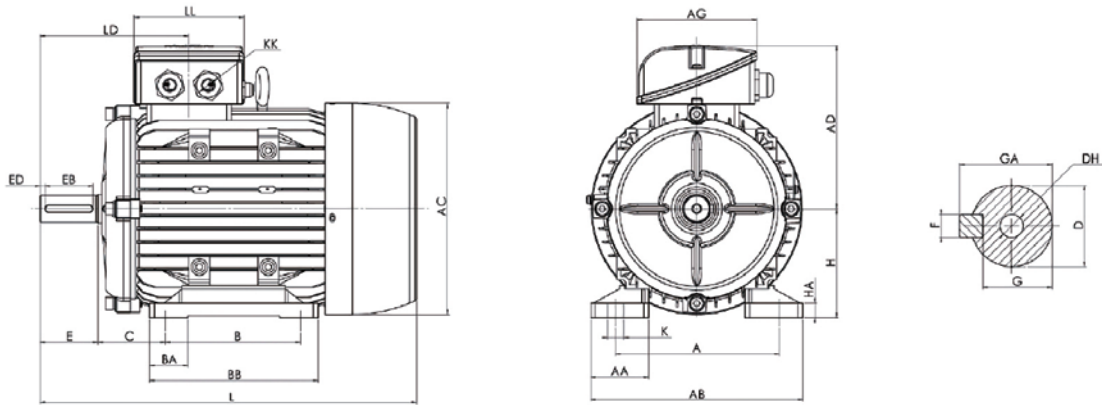
SPEED 1000RPM 6-POLE 50HZ

Model	Rated Output		Rated Speed rpm	Efficiency η % (IE1)	Power factor COS ϕ	Rated current A			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In
	KW	HP				380	400	415				
712-6	0.25	0.37	850	59.0	0.68	0.95	0.9	0.87	2.65	1.9	2.0	4
801-6	0.37	0.5	885	62.0	0.7	1.3	1.23	1.19	3.93	1.9	2.0	4.7
802-6	0.55	0.75	885	65.0	0.72	1.78	1.69	1.63	5.84	1.9	2.1	4.7
90S-6	0.75	1	910	70.0	0.72	2.26	2.15	2.07	7.87	2.1	2.1	5.5
90L-6	1.1	1.5	910	72.9	0.73	3.14	2.98	2.87	11.54	2.0	2.1	5.5
100L-6	1.5	2	920	75.2	0.75	4.04	3.83	3.70	15.57	2.0	2.0	6.0
112M-6	2.2	3	935	77.7	0.76	5.65	5.36	5.17	22.47	2.2	2.2	6.0
132S-6	3	4	960	79.7	0.76	7.52	7.14	6.88	29.84	2.0	2.1	6.5
132M1-6	4	5.5	960	81.4	0.76	9.80	9.31	8.97	39.79	2.0	2.1	6.5
132M2-6	5.5	7.5	960	83.1	0.77	13.1	12.4	12.0	54.71	2.2	2.2	6.5
160M-6	7.5	10	970	84.7	0.77	17.4	16.6	16.0	73.84	2.0	2.1	6.7
160L-6	11	15	970	86.4	0.78	22.2	21.1	20.3	108.3	2.2	2.3	6.7
180L-6	15	20	970	87.7	0.81	32.0	30.4	29.3	147.7	2.1	2.2	6.7
200L1-6	18.5	25	980	88.6	0.81	39.1	37.2	35.8	180.3	2.2	2.2	6.7
200L2-6	22	30	980	89.2	0.83	45.1	42.8	41.3	214.4	2.1	2.2	6.7
225M-6	30	40	980	90.2	0.84	60.1	57.1	55.0	292.3	2.1	2.1	7.0
250M-6	37	50	980	90.8	0.86	71.9	68.3	65.8	360.6	2.1	2.2	7.0
280S-6	45	60	980	91.4	0.86	86.8	82.5	79.5	438.5	2.0	2.1	7.0
280M-6	55	75	980	91.9	0.86	106	100	96.7	536	2.1	2.2	7.0
315S-6	75	100	985	92.6	0.86	143	136	131	727.2	2.1	2.2	7.0
315M-6	90	125	985	92.9	0.86	171	162	156	872.6	2.0	2.1	6.7
315L1-6	110	150	985	93.3	0.86	208	197	190	1066	2.0	2.1	6.7
315L2-6	132	180	985	93.5	0.87	246	234	226	1280	2.0	2.1	6.7
355M1-6	160	200	985	93.8	0.88	295	280	270	1551	1.9	2.0	6.7
355M2-6	200	270	985	94.0	0.88	367	349	336	1939	1.9	2.0	6.7
355L-6	250	340	985	94.0	0.88	459	436	420	2424	1.9	2.0	6.7

SPEED 750 RPM 8-POLE 50HZ

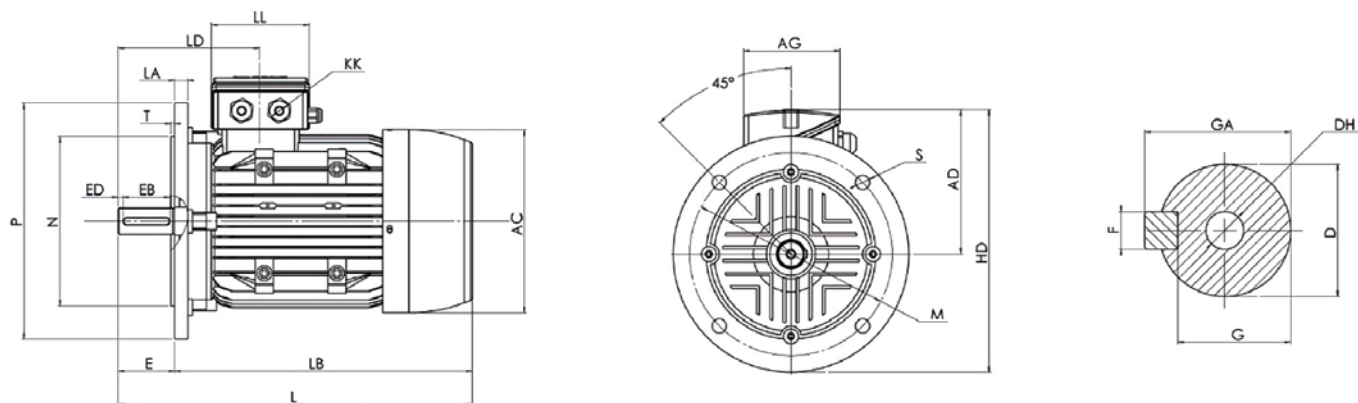
Model	Rated Output		Rated Speed rpm	Efficiency η % (IE1)	Power factor COS ϕ	Rated current A			Rated Torque Nm	Ts/Tn	Tmax/Tn	Is/In
	KW	HP				380	400	415				
801-8	0.18	0.25	645	51.0	0.61	0.88	0.84	0.8	2.49	1.8	1.9	3.3
802-8	0.25	0.37	645	54.0	0.61	1.15	1.1	1.06	3.46	1.8	1.9	3.3
90S-8	0.37	0.5	670	62.0	0.61	1.49	1.41	1.36	5.12	1.8	1.9	4.9
90L-8	0.55	0.75	670	63.0	0.61	2.17	2.07	1.99	7.61	1.8	2	4
100L1-8	0.75	1	680	71.0	0.67	2.4	2.28	2.19	10.23	1.8	2	4
100L2-8	1.1	1.5	680	73.0	0.69	3.32	3.15	3.04	15	1.8	2	5
112M-8	1.5	2	690	75.0	0.69	4.4	4.18	4.03	20.46	1.8	2	5
132S-8	2.2	3	705	78.0	0.71	6.04	5.73	5.53	29.59	1.8	2	6
132M-8	3	4	705	79.0	0.73	7.9	7.51	7.24	40.35	1.8	2	6
160M1-8	4	5.5	720	81.0	0.73	10.3	9.76	9.41	53.06	1.9	2	6
160M2-8	5.5	7.5	720	83.0	0.74	13.6	12.9	12.5	72.59	2	2	6
160L-8	7.5	10	720	85.5	0.75	17.8	16.9	16.3	99.5	2	2	6
180L-8	11	15	730	87.5	0.76	25.1	23.9	23	143.9	2	2	6
200L-8	15	20	730	88.0	0.76	34.1	32.4	31.2	196.23	2	2	6.6
225S-8	18.5	25	730	90.0	0.76	41.1	39	37.6	242.02	1.9	2	6.6
225M-8	22	30	730	90.5	0.78	47.4	45	43.4	287.81	1.9	2	6.6
250M-8	30	40	735	91.0	0.79	735	63.4	60.2	382.47	1.9	2	6.6
280S-8	37	50	735	91.5	0.79	77.8	73.9	71.2	484.04	1.9	2	6.6
280M-8	45	60	735	92.0	0.79	94.1	89.4	86.1	580.74	1.8	2	6.6
315S-8	55	75	735	92.8	0.81	111	106	102	709.80	1.8	2	6.6
315M-8	75	100	735	93.0	0.81	151	144	139	967.91	1.8	2	6.6
315L1-8	90	125	735	93.8	0.82	178	169	163	1161.49	1.8	2	6.6
315L2-8	110	150	735	94.0	0.82	217	106	199	1419.60	1.8	2	6.4
355M1-8	132	180	740	93.7	0.82	261	248	239	1692.08	1.8	2	6.4
355M2-8	160	220	740	94.2	0.82	315	299	288	2051	1.8	2	6.4
355L-8	200	270	740	94.5	0.83	387	368	355	2563.38	1.8	2	6.4

HSC Series Dimensional Drawings



▲ **IM B3 H80-355**

Model	Pole	A	AA	AB	AC	AD	AG	B	BB	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
80	2, 4, 6, 8	125	34	160	167	147	104	100	150	50	19	M6X16	40	30	5	6	15.5	21.5	80	10	4-Φ10	2-M25X1.5	304	119	104
90S	2, 4, 6, 8	140	36	176	182	154.5	104	100	161	56	24	M8X19	50	40	5	8	20	27	90	12	4-Φ10	2-M25X1.5	336	143	104
90L	2, 4, 6, 8	140	36	176	182	154.5	104	125	186	56	24	M8X19	50	40	5	8	20	27	90	12	4-Φ10	2-M25X1.5	361	143	104
100L	2, 4, 6, 8	160	40	200	205	166	104	140	213	63	28	M10X22	60	50	5	8	24	31	100	14	4-Φ12	2-M25X1.5	406	147	104
112M	2, 4, 6, 8	190	50	240	219	182	124	140	225	70	28	M10X22	60	50	5	8	24	31	112	15	4-Φ12	2-M32X1.5	452	147	114
132S	2, 4, 6, 8	216	55	262	258	203	124	140	200	89	38	M12X28	80	65	7.5	10	33	41	132	18	4-Φ12	2-M32X1.5	470	172	114
132M	4, 6, 8	216	55	262	258	203	124	178	238	89	38	M12X28	80	65	7.5	10	33	41	132	18	4-Φ12	2-M32X1.5	508	172	114
160M	2, 4, 6, 8	254	65	314	314	251	162	210	260	108	42	M16X36	110	90	10	12	37	45	160	20	4-Φ14.5	2-M40X1.5	608	256	154
160L	2, 4, 6, 8	254	65	314	314	251	162	254	304	108	42	M16X36	110	90	10	12	37	45	160	20	4-Φ14.5	2-M40X1.5	652	256	154
180M	2, 4, 8	279	70	349	355	267	162	241	311	121	48	M16X36	110	90	10	14	42.5	51.5	180	22	4-Φ14.5	2-M40X1.5	688	271	154
180L	4, 6, 8	279	70	349	355	267	162	279	349	121	48	M16X36	110	90	10	14	42.5	51.5	180	22	4-Φ14.5	2-M40X1.5	726	271	154
200L	2, 4, 6, 8	318	70	388	397	299	210	305	369	133	55	M20X42	110	100	5	16	49	59	200	25	4-Φ16.5	2-M50X1.5	779	296	190
225S	4, 8	356	75	431	446	322	210	286	368	149	60	M20X42	140	125	7.5	18	53	64	225	28	4-Φ18.5	2-M50X1.5	824	329	190
225M	2	356	75	431	446	322	210	311	393	149	55	M20X42	110	100	5	16	49	59	225	28	4-Φ18.5	2-M50X1.5	819	299	190
225M	4, 6, 8	356	75	431	446	322	210	311	393	149	60	M20X42	140	125	7.5	18	53	64	225	28	4-Φ18.5	2-M50X1.5	849	329	190
250M	2	406	80	484	485	358	248	349	445	168	60	M20X42	140	125	7.5	18	53	64	250	30	4-Φ24	2-M63X1.5	910	347	218
250M	4, 6, 8	406	80	484	485	358	248	349	445	168	65	M20X42	140	125	7.5	18	58	69	250	30	4-Φ24	2-M63X1.5	910	347	218
280S	2	457	85	542	547	387	248	368	485	190	65	M20X42	140	125	7.5	18	58	69	280	35	4-Φ24	2-M63X1.5	982	355.5	218
280S	4, 6, 8	457	85	542	547	387	248	368	485	190	75	M20X42	140	125	7.5	20	67.5	79.5	280	35	4-Φ24	2-M63X1.5	982	355.5	218
280M	2	457	85	542	547	387	248	419	536	190	65	M20X42	140	125	7.5	18	58	69	280	35	4-Φ24	2-M63X1.5	1033	355.5	218
280M	4, 6, 8	457	85	542	547	387	248	419	536	190	75	M20X42	140	125	7.5	20	67.5	79.5	280	35	4-Φ24	2-M63X1.5	1033	355.5	218
315S	2	508	120	628	620	527	320	406	570	216	65	M20X42	140	125	7.5	18	58	69	315	45	4-Φ28	2-M63X1.5	1194	397	280
315S	4, 6, 8, 10	508	120	628	620	527	320	406	570	216	80	M20X42	170	160	5	22	71	85	315	45	4-Φ28	2-M63X1.5	1224	427	280
315M	2	508	120	628	620	527	320	457	680	216	65	M20X42	140	125	7.5	18	58	69	315	45	4-Φ28	2-M63X1.5	1304	397	280
315M	4, 6, 8, 10	508	120	628	620	527	320	457	680	216	80	M20X42	170	160	5	22	71	85	315	45	4-Φ28	2-M63X1.5	1334	427	280
315L	2	508	120	628	620	527	320	508	680	216	65	M20X42	140	125	7.5	18	58	69	315	45	4-Φ28	2-M63X1.5	1304	397	280
315L	4, 6, 8, 10	508	120	628	620	527	320	508	680	216	80	M20X42	170	160	5	22	71	85	315	45	4-Φ28	2-M63X1.5	1334	427	280
355M	2	610	116	726	698	642	380	560	750	254	75	M20X50	140	130	5	20	67.5	79.5	355	52	6-Φ28	2-M63X1.5	1486	414	330
355M	4, 6, 8, 10	610	116	726	698	642	380	560	750	254	95	M24X50	170	160	5	25	86	100	355	52	6-Φ28	2-M63X1.5	1516	444	330
355L	2	610	116	726	698	642	380	630	750	254	75	M20X50	140	130	5	20	67.5	79.5	355	52	6-Φ28	2-M63X1.5	1486	414	330
355L	4, 6, 8, 10	610	116	726	698	642	380	630	750	254	95	M24X50	170	160	5	25	86	100	355	52	6-Φ28	2-M63X1.5	1516	444	330



▲ **IM B5 H80-355**

Model	Pole	AC	AD	AG	D	DH	E	EB	ED	F	G	GA	HD	KK	L	LA	LB	LD	LL	M	N	P	S	T
80	2, 4, 6, 8	167	154.5	104	19	M6X16	40	30	5	6	15.5	21.5	255	2-M25X1.5	304	12	264	112	104	165	130	200	12	3.5
90S	2, 4, 6, 8	182	162	104	24	M8X19	50	40	5	8	20	27	262	2-M25X1.5	336	12	286	130	104	165	130	200	12	3.5
90L	2, 4, 6, 8	182	162	104	24	M8X19	50	40	5	8	20	27	262	2-M25X1.5	361	12	311	130	104	165	130	200	12	3.5
100L	2, 4, 6, 8	205	173.5	104	28	M10X22	60	50	5	8	24	31	299	2-M25X1.5	406	13	346	139	104	215	180	250	14.5	4
112M	2, 4, 6, 8	219	190	124	28	M10X22	60	50	5	8	24	31	315	2-M32X1.5	452	14	392	147	114	215	180	250	14.5	4
132S	2, 4, 6, 8	258	203	124	38	M12X28	80	65	7.5	10	33	41	353	2-M32X1.5	470	14	390	172	114	265	230	300	14.5	4
132M	4, 6, 8	258	203	124	38	M12X28	80	65	7.5	10	33	41	353	2-M32X1.5	508	14	428	172	114	265	230	300	14.5	4
160M	2, 4, 6, 8	314	251	162	42	M16X36	110	90	10	12	37	45	426	2-M40X1.5	608	15	498	256	154	300	250	350	18.5	5
160L	2, 4, 6, 8	314	251	162	42	M16X36	110	90	10	12	37	45	426	2-M40X1.5	652	15	542	256	154	300	250	350	18.5	5
180M	2, 4, 8	355	267	162	48	M16X36	110	90	10	14	42.5	51.5	445	2-M40X1.5	688	15	578	271	154	300	250	350	18.5	5
180L	4, 6, 8	355	267	162	48	M16X36	110	90	10	14	42.5	51.5	445	2-M40X1.5	726	15	616	271	154	300	250	350	18.5	5
200L	2, 4, 6, 8	397	299	210	55	M20X42	110	100	5	16	49	59	449	2-M50X1.5	779	17	669	296	190	350	300	400	18.5	5
225S	4, 8	446	322	210	60	M20X42	140	125	7.5	18	53	64	547	2-M50X1.5	824	20	684	329	190	400	350	450	18.5	5
225M	2	446	322	210	55	M20X42	110	100	5	16	49	59	547	2-M50X1.5	819	20	709	299	190	400	350	450	18.5	5
225M	4, 6, 8	446	322	210	60	M20X42	140	125	7.5	18	53	64	547	2-M50X1.5	849	20	709	329	190	400	350	450	18.5	5
250M	2	485	358	248	60	M20X42	140	125	7.5	18	53	64	633	2-M63X1.5	910	22	770	347	218	500	450	550	18.5	5
250M	4, 6, 8	485	358	248	65	M20X42	140	125	7.5	18	58	69	633	2-M63X1.5	910	22	770	347	218	500	450	550	18.5	5
280S	2	547	387	248	65	M20X42	140	125	7.5	18	58	69	662	2-M63X1.5	982	22	842	355.5	218	500	450	550	18.5	5
280S	4, 6, 8	547	387	248	75	M20X42	140	125	7.5	20	67.5	79.5	662	2-M63X1.5	982	22	842	355.5	218	500	450	550	18.5	5
280M	2	547	387	248	65	M20X42	140	125	7.5	18	58	69	662	2-M63X1.5	1033	22	893	355.5	218	500	450	550	18.5	5
280M	4, 6, 8	547	387	248	75	M20X42	140	125	7.5	20	67.5	79.5	662	2-M63X1.5	1033	22	893	355.5	218	500	450	550	18.5	5
315S	2	620	527	320	65	M20X42	140	125	7.5	18	58	69	857	2-M63X1.5	1194	22	1054	397	280	600	550	660	24	6
315S	4, 6, 8, 10	620	527	320	80	M20X42	170	160	5	22	71	85	857	2-M63X1.5	1224	22	1054	427	280	600	550	660	24	6
315M	2	620	527	320	65	M20X42	140	125	7.5	18	58	69	857	2-M63X1.5	1304	22	1164	397	280	600	550	660	24	6
315M	4, 6, 8, 10	620	527	320	80	M20X42	170	160	5	22	71	85	857	2-M63X1.5	1334	22	1164	427	280	600	550	660	24	6
315L	2	620	527	320	65	M20X42	140	125	7.5	18	58	69	857	2-M63X1.5	1304	22	1164	397	280	600	550	660	24	6
315L	4, 6, 8, 10	620	527	320	80	M20X42	170	160	5	22	71	85	857	2-M63X1.5	1334	22	1164	427	280	600	550	660	24	6
355M	2	698	642	380	75	M20X50	140	130	5	20	67.5	79.5	1042	2-M63X1.5	1486	25	1346	414	330	740	680	800	24	6
355M	4, 6, 8, 10	698	642	380	95	M24X50	170	160	5	25	86	100	1042	2-M63X1.5	1516	25	1346	414	330	740	680	800	24	6
355L	2	698	642	380	75	M20X50	140	130	5	20	67.5	79.5	1042	2-M63X1.5	1486	25	1346	414	330	740	680	800	24	6
355L	4, 6, 8, 10	698	642	380	95	M24X50	170	160	5	25	86	100	1042	2-M63X1.5	1516	25	1346	414	330	740	680	800	24	6

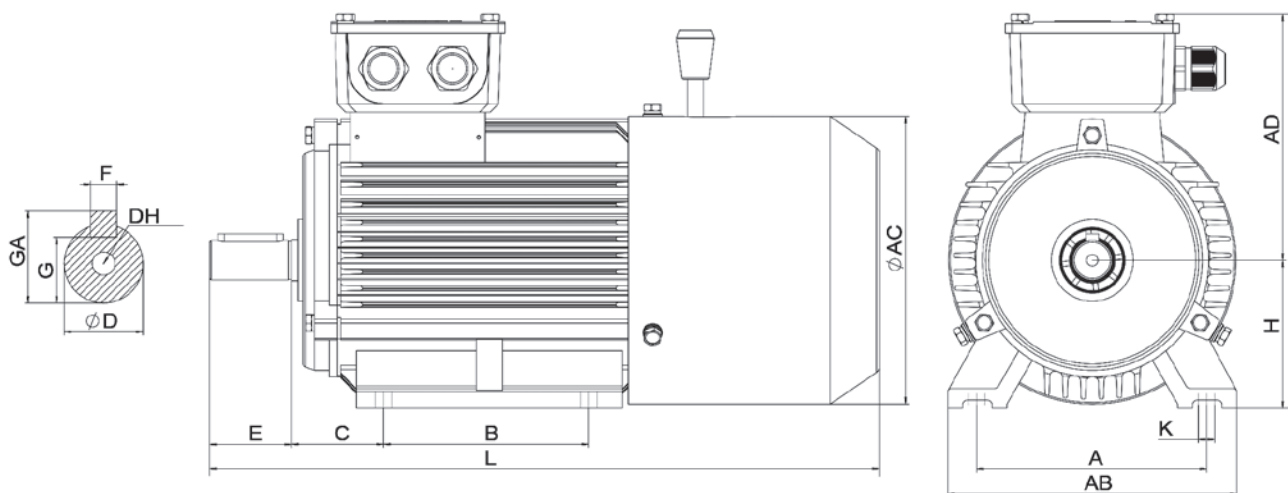
HSEJ Series

Three Phase Asynchronous Induction Motor Brake.



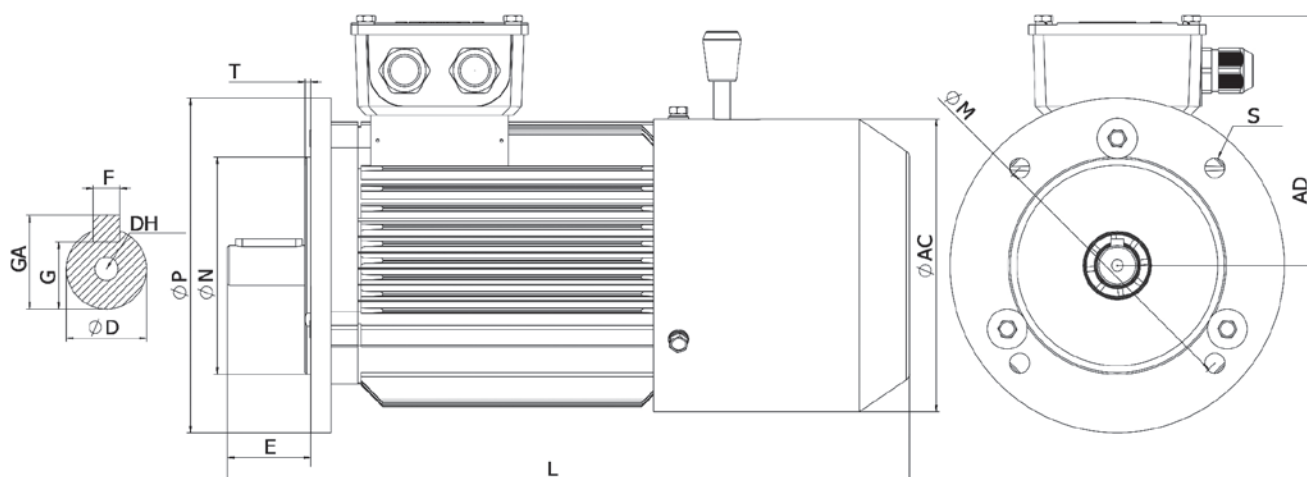
Model	Rated Output		Rated Current			(r.p.m.)	%	Power Factor COS φ	(Nm)	(S)	(w)	Ist/In	Ts/Tn	Tmax/Tn
	KW	HP	380	400	415									
SPEED 3000RPM 2-POLE 50HZ														
HSEJ 6312	0.18	0.25	0.53	0.5	0.48	2720	65	0.8	4	0.2	18	5.5	2.2	2.2
HSEJ 6322	0.25	0.37	0.69	0.66	0.63	2720	68	0.81	4	0.2	18	5.5	2.2	2.2
HSEJ 7112	0.37	0.5	0.99	0.94	0.91	2740	70	0.81	4	0.2	30	6.1	2.2	2.2
HSEJ7122	0.55	0.75	1.4	1.33	1.28	2740	73	0.82	4	0.2	30	6.1	2.2	2.3
HSEJ8012	0.75	1	1.9	1.8	1.74	2840	72.1	0.83	7.5	0.2	40	6.5	2.2	2.3
HSEJ8022	1.1	1.5	2.65	2.51	2.42	2840	75	0.84	7.5	0.2	40	7	2.2	2.3
HSEJ 90S-2	1.5	2	3.51	3.33	3.21	2840	77.2	0.84	15	0.2	50	7	2.2	2.3
HSEJ 90L-2	2.2	3	4.93	4.68	4.51	2840	79.7	0.85	15	0.2	50	7	2.2	2.3
HSEJ 100L-2	3	4	6.41	6.09	5.87	2860	81.5	0.87	30	0.2	65	7	2.2	2.3
HSEJ 112M-2	4	5.5	8.29	7.88	7.59	2880	83.1	0.88	40	0.25	70	7	2.2	2.3
HSEJ 132S1-2	5.5	7.5	11.2	10.6	10.3	2900	84.7	0.88	75	0.25	95	7	2	2.3
HSEJ 132S2-2	7.5	10	15	14.3	13.8	2900	86	0.88	75	0.25	95	7	2	2.3
HSEJ 160M1-2	11	15	21.4	20.3	19.6	2930	87.6	0.89	150	0.35	110	7	2	2.3
HSEJ 160M-2	15	20	28.8	27.4	26.4	2930	88.7	0.89	150	0.35	110	7	2	2.2
SPEED 1500RPM 4-POLE 50HZ														
HSEJ 6314	0.12	0.17	0.44	0.42	0.41	1310	57	0.72	4	0.20	18	5	2.1	2.4
HSEJ 6324	0.18	0.25	0.62	0.59	0.57	1310	60	0.73	4	0.20	18	5	2.1	2.4
HSEJ 7114	0.25	0.37	0.79	0.75	0.72	1330	65	0.74	4	0.20	30	5	2.1	2.4
HSEJ 7124	0.37	0.5	1.12	1.06	1.02	1330	67	0.75	4	0.20	30	5.2	2.1	2.4
HSEJ 8014	0.55	0.75	1.57	1.49	1.43	1390	71.1	0.75	7.5	0.20	40	6	2.4	2.3
HSEJ 8024	0.75	1	2.08	1.97	1.9	1390	72.1	0.76	7.5	0.20	40	6	2.3	2.3
HSEJ 90S-4	1.1	1.5	2.89	2.74	2.64	1390	75	0.77	15	0.20	50	6.5	2.3	2.3
HSEJ 90L-4	1.5	2	3.73	3.55	3.42	1390	77.2	0.79	15	0.20	50	6.5	2.3	2.3
HSEJ 100L1-4	2.2	3	5.17	4.91	4.74	1390	79.7	0.81	30	0.20	65	7	2.2	2.3
HSEJ 100L2-4	3	4	6.81	6.47	6.24	1410	81.5	0.82	30	0.20	70	7	2.2	2.3
HSEJ 112M-4	4	5.5	8.91	8.46	8.16	1410	83.1	0.82	40	0.25	70	7	2.2	2.3
HSEJ 132S-4	5.5	7.5	11.9	11.3	10.9	1435	84.7	0.83	75	0.25	95	7	2.2	2.3
HSEJ 132M-4	7.5	10	15.7	15	14.4	1440	86	0.84	75	0.25	95	7	2.2	2.3
HSEJ 160M-4	11	15	22.7	21.6	20.8	1440	87.6	0.84	150	0.35	110	7	2.2	2.3
HSEJ 160L-4	15	20	30.2	28.7	27.6	1460	88.7	0.85	150	0.35	110	7	2.2	2.2
SPEED 1000RPM 6-POLE 50HZ														
HSEJ 90S-6	0.75	1	2.26	2.15	2.07	910	70	0.72	15	0.20	50	5.5	1.9	2.2
HSEJ 90L-6	1.1	1.5	3.14	2.98	2.87	910	72.9	0.73	15	0.20	50	5.5	1.9	2.2
HSEJ 100L-6	1.5	2	4.04	3.83	3.7	920	75.2	0.75	30	0.20	70	6	1.9	2.2
HSEJ 112M-6	2.2	3	5.65	5.36	5.17	935	77.7	0.76	40	0.25	70	6	2	2.2
HSEJ 132S-6	3	4	7.52	7.14	6.88	960	79.7	0.76	75	0.25	95	6.5	2	2.2
HSEJ 132M1-6	4	5.5	9.8	9.31	8.97	960	81.4	0.76	75	0.25	95	6.5	2	2.2
HSEJ 132M2-6	5.5	7.5	13.1	12.4	12	960	83.1	0.77	75	0.35	95	6.5	2	2
MSEJ160M-6	7.5	10	17.4	16.6	16	970	84.7	0.77	150	0.35	110	6.5	2	2
MSEJ160L-6	11	15	22.2	21.1	20.3	970	86.4	0.78	150	0.35	110	6.5	1.7	2

HSEJ Series B3 dimension



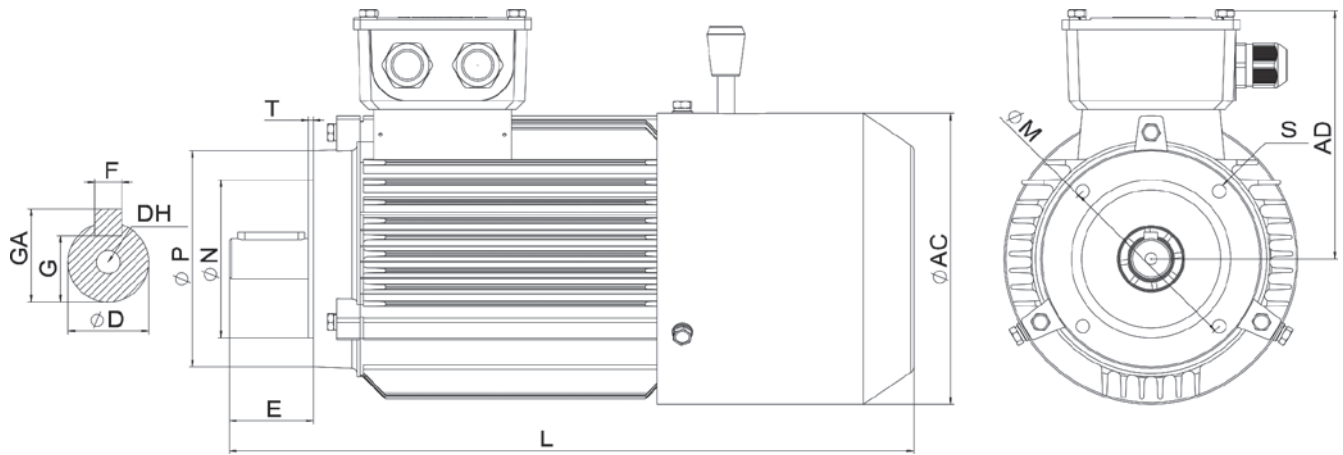
FRAME SIZE	A	B	C	D	E	F	G	GA	H	K	AB	AC	AD	L	DH
HSEJ 63	100	80	40	11	23	4	8.5	12.5	63	7	137	123	111	271	M4X12
HSEJ 71	112	90	45	14	30	5	11	16	71	7	133	137	127	305	M5X12
HSEJ 80	125	100	50	19	40	6	15.5	21.5	80	10	165	155	145	344	M6X16
HSEJ 90S	140	100	56	24	50	8	20	28	90	10	180	175	155	386	M8X19
HSEJ 90L	140	125	56	24	50	8	20	28	90	10	180	175	155	408	M8X19
HSEJ 100L	160	140	63	28	60	8	24	32	100	12	205	196	180	444	M10X22
HSEJ 112M	190	140	70	28	60	8	24	32	112	12	230	220	190	470	M10X22
HSEJ 132S	216	140	89	38	80	10	33	43	132	12	270	259	210	584	M12X28
HSEJ 132M	216	178	89	38	80	10	33	43	132	12	270	259	210	584	M12X28
HSEJ 160M	254	210	108	42	110	12	37	45	160	15	320	315	255	710	M16X36
HSEJ 160L	254	254	108	42	110	12	37	45	160	15	320	315	255	755	M16X36

HSEJ Series B5 dimension



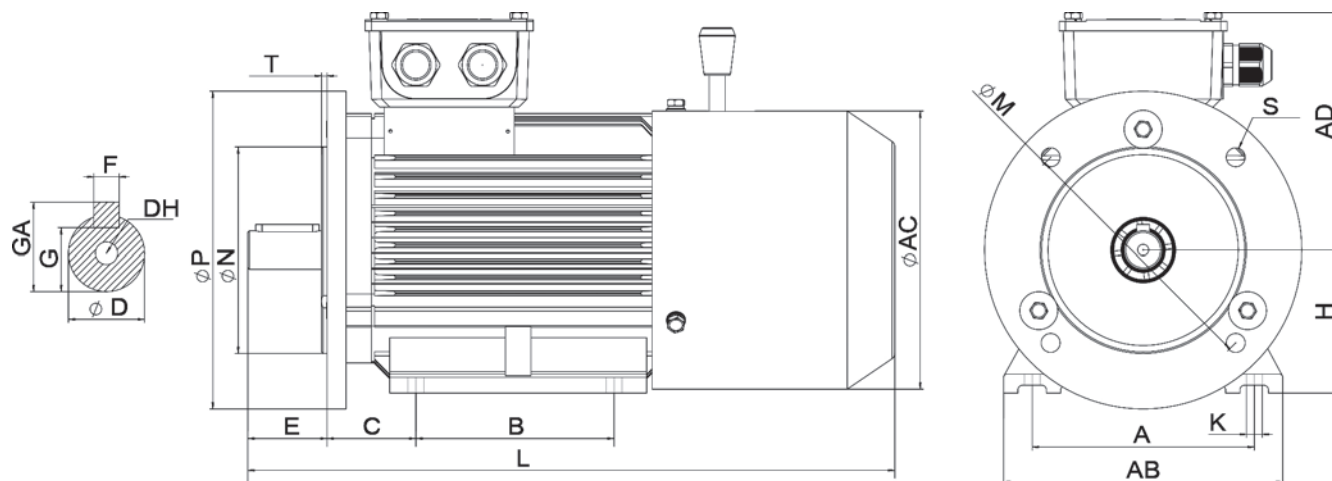
FRAME SIZE	D	E	F	G	GA	M	N	P	S	T	Flange Holes	AC	AD	L	DH
HSEJ 63	11	23	4	8.5	12.5	115	95	140	10	3	4	123	111	271	M4X12
HSEJ 71	14	30	5	11	16	130	110	160	10	3.5	4	137	127	305	M5X12
HSEJ 80	19	40	6	15.5	21.5	165	130	200	12	3.5	4	155	145	344	M6X16
HSEJ 90S	24	50	8	20	28	165	130	200	12	3.5	4	175	155	386	M8X19
HSEJ 90L	24	50	8	20	28	165	130	200	12	3.5	4	175	155	408	M8X19
HSEJ 100L	28	60	8	24	32	215	180	250	15	4	4	196	180	444	M10X22
HSEJ 112M	28	60	8	24	32	215	180	250	15	4	4	220	190	470	M10X22
HSEJ 132S	38	80	10	33	43	265	230	300	15	4	4	259	210	584	M12X28
HSEJ 132M	38	80	10	33	43	265	230	300	15	4	4	259	210	584	M12X28
HSEJ 160M	42	110	12	37	45	300	250	350	19	5	4	315	255	710	M16X36
HSEJ 160L	42	110	12	37	45	300	250	350	19	5	4	315	255	755	M16X36

HSEJ Series B14 dimension



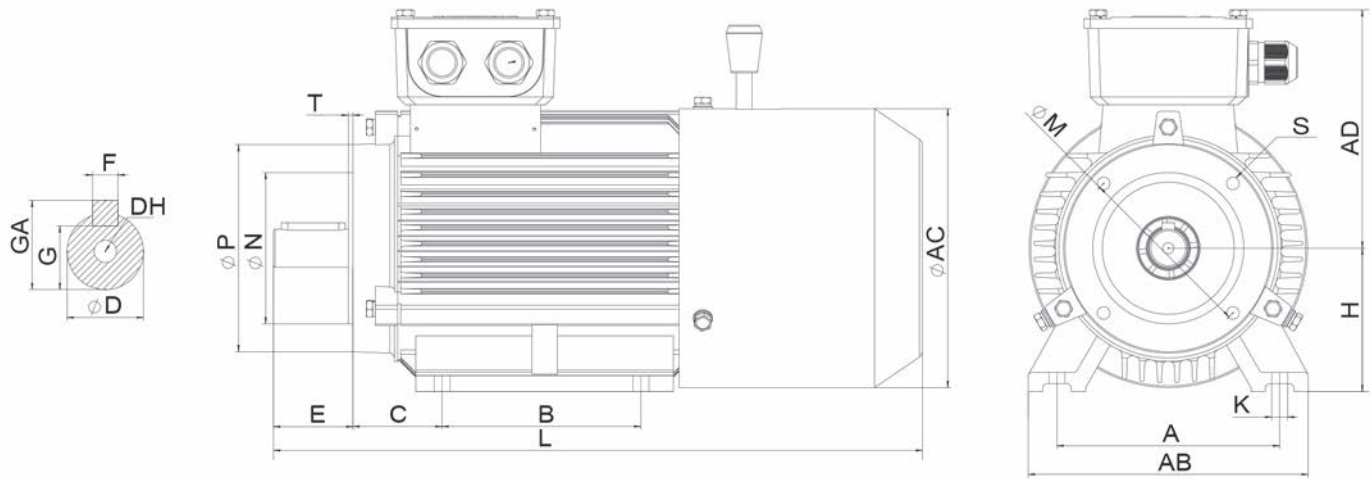
FRAME SIZE	Flange	D	E	F	G	GA	M	N	P	S	T	Flange Holes	AC	AD	L	DH
HSEJ 63	B14	11	23	4	8.5	12.5	75	60	90	M5	2.5	4	123	111	271	M4X12
HSEJ 71	B14	14	30	5	11	16	85	70	105	M6	2.5	4	137	127	305	M5X12
HSEJ 80	B14	19	40	6	15.5	21.5	100	80	120	M6	3	4	155	145	344	M6X16
HSEJ 90S	B14	24	50	8	20	28	115	95	140	M8	3	4	175	155	386	M8X19
HSEJ 90L	B14	24	50	8	20	28	115	95	140	M8	3	4	175	155	408	M8X19
HSEJ 100L	B14	28	60	8	24	32	130	110	160	M8	3.5	4	196	180	444	M10X22
HSEJ 112M	B14	28	60	8	24	32	130	110	160	M8	3.5	4	220	190	470	M10X22
HSEJ 132S	B14	38	80	10	33	43	165	130	200	M10	3.5	4	259	210	584	M12X28
HSEJ 132M	B14	38	80	10	33	43	165	130	200	M10	3.5	4	259	210	584	M12X28

HSEJ Series B35 dimension



FRAME SIZE	A	B	C	D	E	F	G	GA	H	K	M	N	P	S	T	Flange Holes	AB	AC	AD	L	DH
HSEJ 63	100	80	40	11	23	4	8.5	12.5	63	7	115	95	140	10	3	4	137	123	111	271	M4X12
HSEJ 71	112	90	45	14	30	5	11	16	71	7	130	110	160	10	3.5	4	133	137	127	305	M5X12
HSEJ 80	125	100	50	19	40	6	15.5	21.5	80	10	165	130	200	12	3.5	4	165	155	145	344	M6X16
HSEJ 90S	140	100	56	24	50	8	20	28	90	10	165	130	200	12	3.5	4	180	175	155	386	M8X19
HSEJ 90L	140	125	56	24	50	8	20	28	90	10	165	130	200	12	3.5	4	180	175	155	408	M8X19
HSEJ 100L	160	140	63	28	60	8	24	32	100	12	215	180	250	15	4	4	205	196	180	444	M10X22
HSEJ 112M	190	140	70	28	60	8	24	32	112	12	215	180	250	15	4	4	230	220	190	470	M10X22
HSEJ 132S	216	140	89	38	80	10	33	43	132	12	265	230	300	15	4	4	270	259	210	584	M12X28
HSEJ 132M	216	178	89	38	80	10	33	43	132	12	265	230	300	15	4	4	270	259	210	584	M12X28
HSEJ 160M	254	210	108	42	110	12	37	45	160	15	300	250	350	19	5	4	320	315	255	710	M16X36
HSEJ 160L	254	254	108	42	110	12	37	45	160	15	300	250	350	19	5	4	320	315	255	755	M16X36

HSEJ Series B34 dimension



FRAME SIZE	Flange	A	B	C	D	E	F	G	GA	H	K	M	N	P	S	T	Flange Holes	AB	AC	AD	L	DH
HSEJ 63	B34	100	80	40	11	23	4	8.5	12.5	63	7	75	60	90	M5	2.5	4	137	123	111	271	M4X12
HSEJ 71	B34	112	90	45	14	30	5	11	16	71	7	85	70	105	M6	2.5	4	133	137	127	305	M5X12
HSEJ 80	B34	125	100	50	19	40	6	15.5	21.5	80	10	100	80	120	M6	3	4	165	155	145	344	M6X16
HSEJ 90S	B34	140	100	56	24	50	8	20	28	90	10	115	95	140	M8	3	4	180	175	155	386	M8X19
HSEJ 90L	B34	140	125	56	24	50	8	20	28	90	10	115	95	140	M8	3	4	180	175	155	408	M8X19
HSEJ 100L	B34	160	140	63	28	60	8	24	32	100	12	130	110	160	M8	3.5	4	205	196	180	444	M10X22
HSEJ 112M	B34	190	140	70	28	60	8	24	32	112	12	130	110	160	M8	3.5	4	230	220	190	470	M10X22
HSEJ 132S	B34	216	140	89	38	80	10	33	43	132	12	165	130	200	M10	3.5	4	270	259	210	584	M12X28
HSEJ 132M	B34	216	178	89	38	80	10	33	43	132	12	165	130	200	M10	3.5	4	270	259	210	584	M12X28

3 PHASE MOTOR FOR COOLING TOWER CT-SERIES

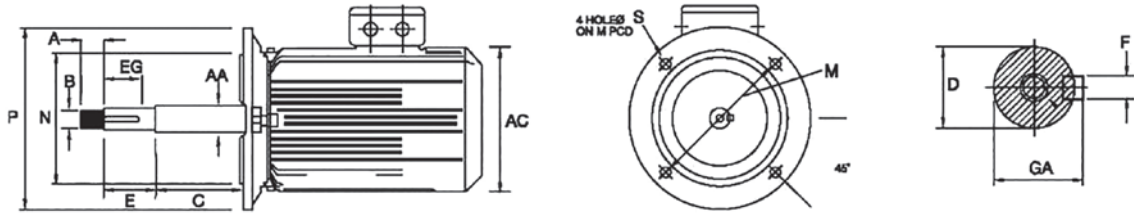
- **Designed for operation in 100% humidity and the most corrosive environments**
- **Designed for operate in shaft down position**
- **Designed for high protection from water leaking**
- **No need additional gear operated**
- **Low maintenance**

CT series is derived from three-phase asynchronous motors with having extra longer shaft and no rear fan. They have varieties of output power and output speed in order to cover different cooling tower size. The body is designed to work under high humidity condition and corrosive environment as well as water leakage protection. The body surface treatment is covered with special thick anti-rust paint layer for rust proof from moisture and with double rubber seal prevention for vapor leakage innards.

Standard Features

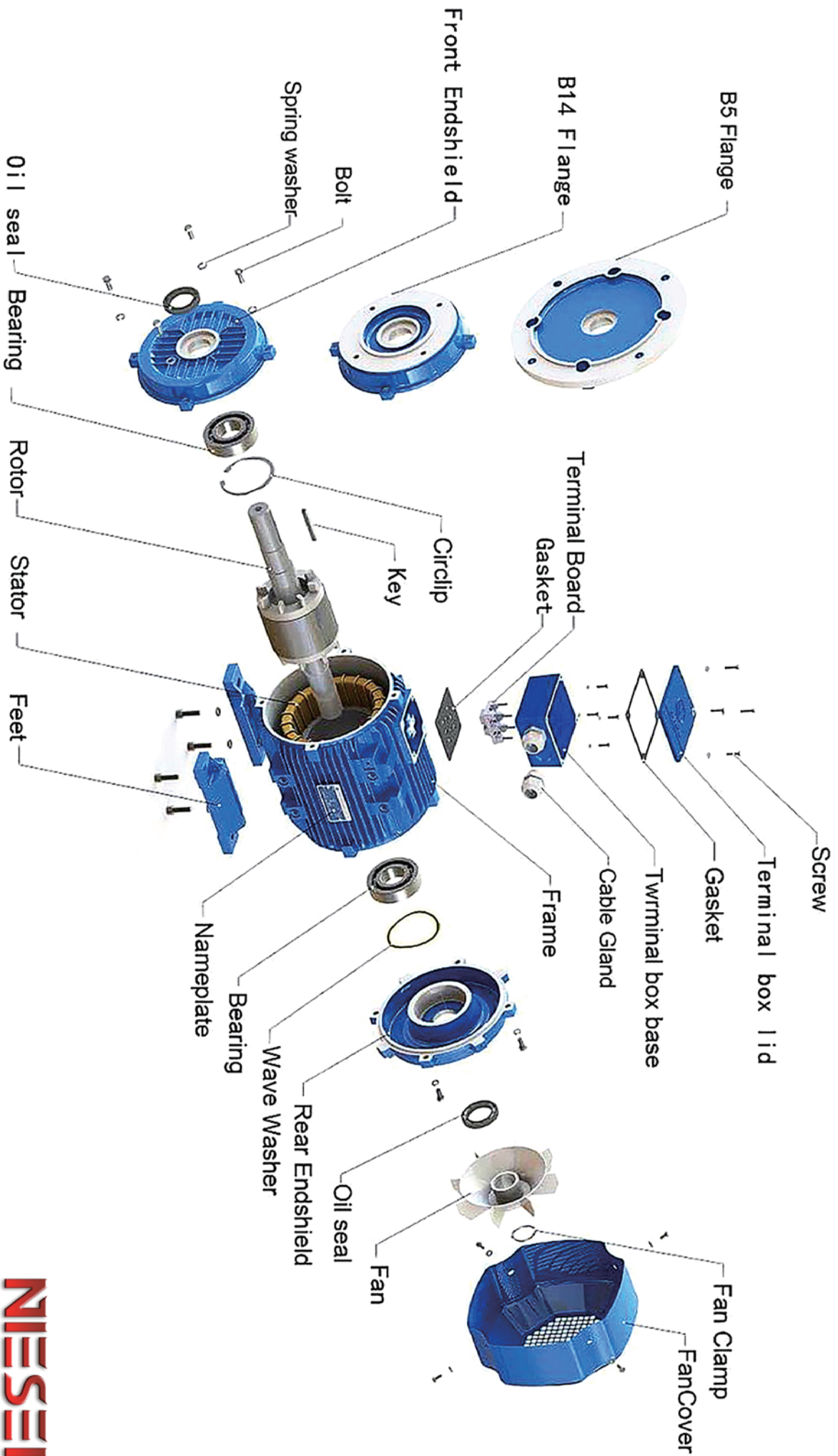
Three-phase, 6, 8, 10, 12, 16 and 18 pole, 50Hz or 60Hz

- Voltage: 220/380V for below 5.5HP and 380/660V for 5.5HP and Higher (for normal order)
- Totally Enclosed Fan Cooled-TEFC (IP55) water tight
- Externally Special Anti-Rusted Painted Double Sealed- 2RS Ball Bearings
- 1045 Carbon Steel Shaft
- Class F Insulation for all frames
- Continuous Duty (S1)



MODEL	POLE	KW	HP	TECHNICAL DATA								DIMENSION (mm)								BEARING	
				speed	current	torque	Eff	mounting				shaft									
				RPM	AMP	Nm	%	M	N	P	S	D	AA	E	A	C	F	GA	EG	DE	NDE
CT 71-6	6	0.18	0.25	890	0.87	1.93	56	130	110	160	10	19	25	35	15	70	5	21	25	6205-2RS	6204-2RS
CT 80MA-6	6	0.37	0.5	900	1.3	3.93	63	165	130	200	12	24	30	45	20	70	7	27	30	6206-2RS	6204-2RS
CT 80MB-6	6	0.55	0.75	910	1.8	5.84	66	165	130	200	12	24	30	45	20	72	7	27	30	6206-2RS	6204-2RS
CT 90SA-6	6	0.75	1	910	2.3	7.87	73	165	130	200	12	24	30	45	20	72	7	27	30	6206-2RS	6205-2RS
CT 90SB-6	6	1.1	1.5	910	3.2	11.54	74	165	130	200	12	24	30	60	20	72	7	27	30	6206-2RS	6205-2RS
CT 132MB-6	6	5.5	7.5	960	12.6	54.71	95	265	230	300	15	38	50	83	25	70	10	41.5	80	6210-2RS	6308-2RS
CT 100LB-8	8	1.1	1.5	700	3.3	15	74	215	180	250	14	28	35	60	25	75	7	31	45	6207-2RS	6206-2RS
CT 112M-8	8	1.5	2	700	4.3	20.46	76	215	180	250	14	28	35	60	25	75	7	31	45	6307-2RS	6306-2RS
CT 132S-8	8	2.2	3	710	5.8	29.59	81	265	230	300	15	32	40	60	25	110	10	37	45	6308-2RS	6308-2RS
CT 160LA-10	10	4	5.5	570	10.9	67	83	300	250	350	18	38	45	60	50	100	10	40	50	6309-2RS	6309-2RS
CT 160LB-10	10	5.5	7.5	570	15.1	92.1	83	300	250	350	18	50	55	70	50	170	12	54	65	6311-2RS	6309-2RS
CT 180L-12	12	7.5	10	450	21.8	147.1	84	300	250	350	18	50	55	70	50	170	12	54	65	6311-2RS	6311-2RS
CT 225S-18	18	11	15	322	34	445.11	87	400	350	450	19	55	65	115	85	240	15	65	92	6313-2RS	6313-2RS

	71-6	80MA-6	80MB-6	90SA-6	90SB-6	132MB-6	100LB-8	112M-8	132S-8	160LA-10	160LB-10	180L-12	225S-18
WEIGHT (KG)	7.5	16.5	18	25	26	85	37	48	65	148	155	188	299
NUT SIZE, B	M12	M16	M16	M16	M16	M30	M24	M24	M24	M30	M36	M36	M48
Cable Gland Size	M20*1.5	M20*1.5	M20*1.5	M20*1.5	M20*1.5	2-M25*1.5	M20*1.5	2-M25*1.5	2-M25*1.5	2-M40*1.5	2-M40*1.5	2-M40*1.5	2-M50*1.5



NIESEI

T R A N S M I S S I O N



บริษัท กรุงเทพเกียร์ รุ่งเรืองแมคคานิค จำกัด

ที่อยู่สำนักงานใหญ่ : 333/224 ซ.เพชรเกษม 110 ถ.เพชรเกษม แขวงหนองค้างพลู เขตหนองแขม กทม. 10160

ที่อยู่โรงงาน : 9/98 ม.3 ต.ดอนไก่ดี อ.กระทุ่มแบน จ.สมุทรสาคร 74110

โทรศัพท์ : 034-446-210 (auto 10 line)

แฟกซ์ : 034-446-211

E-mail : bangkokgear@hotmail.com

www.bangkokgear.com